FERRIS STATE UNIVERSITY

COLLEGE OF TECHNOLOGY

TRANSPORTATION & ELECTRONICS DEPARTMENT

Program Review

Of the

A.A.S. in Automotive Body Technology

1998-1999

Program Review

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SECTION ONE

AUTOMOTIVE BODY PROGRAM REVIEW

After the restructuring in 1996, the Auto and Heavy Equipment Department was combined with the Electronic Department to form the Transportation and Electronics Department. The Transportation and Electronics Department consists of five program areas. Auto Body, Auto Service, Heavy Equipment, Automotive & Heavy Equipment Management and Electronics. The Auto Body Program is one of the suppliers of student to the BS management program. The Transportation and Electronics Department is one of the three departments that make up the entire College of Technology. The Auto Body Program enrollment for last 10 years was 50 and for the fall of 1998 is 50 again. The target enrollment for the Auto Body Program is 50 students The Auto Body Program enrollment has been consistent over the last ten years with an average of 48.7 students.. The Auto Body Program with its consistent enrollment is a very significant part of the Transportation and Electronics Department, which constitutes 1/3 of the College Of Technology. As a result the College Of Technology is now the largest college in the University. The faculty in the program are setting up their first articulation process this year which should help enrollment also. All indications point to a steady enrollment in the Automotive Body Program in the next few years.

FERRIS FACT BOOK
ENROLLMENT BY PROGRAM
FALL TERM

1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99
42	55	59	62	48	45	43	42	41	50

To help compete with other schools Ferris's Auto Programs began making ties with major automotive manufactures. We receive approximately ½ million dollars per year in vehicle donations alone, plus training material, equipment, manuals, engines, tools and faculty up-date training. The vehicles and equipment are used both in the Auto Service and the Auto Body Program. A number of the vehicles are used every year in the Auto Body Program to offer very consistent and structured learning. This is done by allowing the students to work on all the same projects. These structure projects are fenders, quarter panels, hoods, etc.

Over the last five years the equipment needs of the program have been met. The majority of the equipment has been through industrial contacts and donations. Very little planing and budgeting has been done by the University. However, the program is probably one of the best-equipped programs in the University. All major equipment acquisition have already been made for the program and are listed below. In 1994 a company donated 65,000 dollars worth of moldings for the programs use. In 1997 Altra products we received 90,000 dollars worth of frame machine fixtures for vehicles. These fixtures allow the frame machines that we own work on many of the new vehicles. In 1997 the Auto Body Program received a 50,000 dollar minor cap to install an air handling system for program certification. In 1998 Bill Irvine from PPG Industries donated a paint mixing system which includes a special computer and software. He also came to the University and set up the paint mixing room. In 1997 Greg Key wrote a state grant for a computerized frame straightening measuring system called the Shark. This is the latest in

frame measuring systems and uses sonar like GPS. In 1997 West Michigan Auto Body Association donated half the cost ($1,600) of the I Car curriculum to the University. The Auto Body's S&E account supplied the rest of the cost for the I Car curriculum. This allowed the Auto Body curriculum to be totally rewritten and updated to the new standard. The I Car standard is being driven by the insurance company's which mandate all Auto Body facilities have there technicians be I Car certified. In 1999 the Auto Body Program received some Voc Ed money to purchase a prep station. The prep station cost would have been around 22,000 dollars plus installation, which includes mechanical engineers, electricians, and roofer. Because of the industrial relationships with the program the cost of the prep station was only 13,890 dollars. The installation was done by Mr. Sam McFarland of BPH Mechanical Services in Greenville, MI. Mr. McFarland's company installed the prep station for free which cost 2,883 dollars. He did this because two of his daughters graduated from Ferris State University. The roof work and the electrical work was paid for out of the Auto Body S&E budget. The program creativity can be seen by combining two companies, resources Voc Ed money and S&E money to purchase a major piece of equipment. This prep station is the equivalent of a 100,000 dollar paint booth. This addition allows the Auto Body Program to have four paint booths. This was desperately needed for painting small parts as well as at the end of the semester when all fifty students are trying to paint their repaired vehicles. During winter semester of 1999 the Auto Body program received a donation of 250 fenders, hoods, and quarter panel's. This donation will allow us to redonate more vehicles to high schools which is a good recruiting tool.

The Auto Body program was one of the programs that fell below the priority one time and received no Voc Ed money for years. The faculty in the Auto Service program gave some Voc Ed money to the Auto Body program one year because of their needs. As can be seen, the quality of the Automotive Body Program is financially linked to industry. 70% to 90% of the money it takes to run the Automotive Body Program comes from industry. With the high probability of the vocational funds being eliminated or lowered in the near future, the need for a strong tie to industry will be essential for any program at Ferris to be competitive.

Placement in the Automotive Body area is 100%. Some choose to go on to our Automotive and Heavy Equipment Management Program and pursue a BS degree.

SECTION TWO

AUTOMOTIVE BODY PROGRAM

GRADUATE FOLLOW-UP SURVEY

2' 7

Ferris State University
Automotive Body Program
Survey of Graduates

1. Where are you currently working? YES

   Address: BEARS AUTO BODY REPAIR 27942 Co RD 40 WAKARUSA 46573

2. How long have you been employed there? 3yrs

3. What is your present position/job title? TECH

4. What was your starting salary? $ 40% of 34.00 per hr

5. What is your present salary? $ ——

6. Was it difficult to find a job when you graduated? Yes____ No✓
   Explain: NEVER HAVE HAD ANY PROBLEM GETTING A JOB IN THE AUTOBODY TRADE

7. Which phase of your on-campus education (courses, auto-body lab) was most valuable in preparing you for work? LAB WORK IS VERY CRITICAL – HELPS A PERSON LEARN BASICS QUICKER, IF YOU DON'T KNOW SOMETHING IT CAN ALWAYS BE LOOKED UP IN MANUALS ETC.

8. Based upon your course work at Ferris, which of the ASE/Michigan certification areas were you able to obtain? If not, please explain the area of concern.

   - ☑ PAINTING AND REFINISHING
   - ☑ NON STRUCTURAL ANALYSIS & DAMAGE REPAIR
   - ☑ STRUCTURAL ANALYSIS AND DAMAGE REPAIR
   - ☑ MECHANICAL AND ELECTRICAL COMPONENTS
   - ☐ DAMAGE ANALYSIS AND ESTIMATING

   ALSO I-CAR
   CRC
   EL 2
   CR 2
   SXS
   IMACA 1a -

Survey of Graduates

The alumni survey was mailed to 200 program graduates asking, essentially, how successfully the Auto Body program had prepared its graduates for their technical careers. The survey contained 14 questions. Twenty-five of those surveyed responded. The bulk of the responses came from mid-career graduates, those having graduated in the 1970s and 1980s. Of the 32 responses, 2 came from 1990s graduates, 7 from 1980s, 10 from 1970s, and 6 from 1960s graduates. Since program enrollment has not varied significantly over the four decades represented in the survey responses, that most came from mid-career graduates may simply reflect that this group is established in their careers and felt they could respond meaningfully to the survey.

Thirty-two responses from a mailing of 200 represents a sampling of 16%

Survey responses

Questions 1 through 5 asked employment background: where the respondent is currently working and length of time with present employer, current position or job title, starting pay and current pay.

Employment

- 3 are self-employed
- 7 have corporate employers
- 6 work in dealerships
- 9 work for independent body shops
- 2 works for an insurance company
- 1 is a teacher
- 3 are employed in related industries

Years with Current Employer

5 years or less	13
6 to 9 years	6
10 to 19 years	7
20 to 29 years	4
30 plus	1

Job title/present position

Owner	7
President/Vice President	4
Manager/Director	5
Technician	5
Damage Consultant	2
Instructor	1
Service Representative	1
Counterman	1
Automotive Refinisher	1
Auto Appraiser	1

Job Bank Supervisor	1	
Retired	1	
Disabled	1	

Starting pay

Under $10,000	1	(in 1971)
$10,000-15,000	5	
$16,000-20,000	3	
$21,000-25,000	4	
$26,000-30,000	2	
$31,000-39,000	3	
$40,000 plus	2	
unreported or commission	7	

Current pay

$21,000-30,000	2
$31,000-40,000	6
$41,000-50,000	3
$51,000-80,000	7
$81,000-100,000	1

Questions 6 through 10 sought data on the respondents' placement and preparation for their career:

Whether they experienced difficulty securing their first job after graduation
What phase of their education did they feel most valuable
What ASE certifications were they able to obtain based on FSU coursework
What should be changed about the Auto Body curriculum
How effective was the lab experience in preparing them for employment
What changes should be made

Placement difficulty

Yes 2
No 28
- 5 had jobs lined up at graduation
- 5 noted the auto body field has a shortage of skilled people
- 1 attributed his employment to Ferris State University's reputation
- 2 continued in the Automotive Management program

Phase of education found most valuable

Hands-on experience in the auto body labs	16
All courses in the Auto Body curriculum	9
Welding classes and experience	3
Business and management classes	3

ASE/Michigan certifications obtained

Painting and refinishing	16
Structural analysis and damage repair	10
Non-structural analysis and damage repair	14
Damage analysis and estimating	7
Mechanical and electrical components	8

Effectiveness of course work as preparation for work in their field

Excellent	2	
Very good	14	
Good	9	
Deficient	1	program should have apprenticeship geared toward work in a dealership, emphasizing quality-time-work.

Recommended changes to the Auto Body curriculum

- Greater emphasis on speed in all phases of work
- Keep up with current technology (3 responses)
- More emphasis on quality
- Importance of retaining good instruction
- More use of computers
- Greater inclusion of I-CAR training
- Add a one-semester co-op or internship
- More instruction in business management
- Emphasize the importance of continuing education

Effectiveness of the Auto Body lab experience as preparation for work in their field

Excellent	6	
Very good	10	
Good	13	
Fair	1	
Deficient	1	work pace is too slow

Recommended changes to the Auto Body labs

- Greater speed
- Push students to get I-CAR and State Certification before graduation
- More use of computers
- More structural diagnosis
- More emphasis on what to expect when they enter the work force (3)
- Stay current with industry practices (2)
- Use products beyond PPG
- More in-depth painting study (chemistry and testing)

Questions 11 and 12 asked about program's equipment and computer training

- Was the equipment in courses and labs up-to-date
- Is the computer training received in the program useful on the job

Status of equipment

Since most respondents lacked current contact with the Auto Body program, their responses reflected positively on the condition of the equipment at the time of their study, but also the need to keep current with the industry.

Typical responses:

[yes] At the time of my graduation (1990). Now I hope you are teaching about Computers, electrical, air bags, etc.

Yes, the equipment was great, but technology changes every day. Body lab needs to update regularly. Funds should be appropriated to maintain Ferris's excellence in this field. If you fall behind you accept second best.

Computers and Computer skills

Most of the respondents graduated before computers were integrated into the curriculum.

Question 13 asked whether the respondent would consider Ferris State University if returning for a Bachelor's degree.

21 responded yes, 3 maybe, 5 no.

Those answering No already have a Bachelor's degree.

Question 14 asked the year of graduation. Responses ranged as follows:

Year of graduation	Number of responses
1998	1
1996	1
1994	2
1992	1
1985	2
1983	2
1982	1
1980	2
1978	1
1977	2
1976	2
1975	3
1974	1
1973	3
1971	2
1969	1
1968	1
1967	1
1966	1
1964	1

Summary

The respondents are positive on the program. As noted, graphing the response demographics would show a bell-shaped curve with bulk of the responses coming from graduates 10-20 years out of program, who are unable to comment on current teaching technology, but recognized from their professional experience directions program needs to take—most specifically the inclusion of ICAR instruction, which in fact form the program's training core.

Salaries show auto body to be a financially rewarding career with no placement difficulty whatsoever. Rather, an acute shortage exists of trained professionals and opportunities for career advancement include corporate employment and business ownership.

Auto body labs considered are essential to proper training and these labs are to be equipped with up-to-date equipment. The respondents gave near unanimous endorsement of Ferris education: 19 of 25 would consider Ferris for further study, though the reality of these graduates returning to Ferris for a Bachelor's degree is limited by time, distance, and the responsibilities of their current positions.

Survey data could have benefited from more responses from recent graduates; nonetheless, information from mid-career graduates is valuable because it shows career trends. Also the success reported by respondents more advanced in their careers indicates that their Ferris training enabled them to keep up with sweeping changes in field and prepared them for advancement.

SECTION TWO

ALUMNI SURVEY OF GRADUATES

Question 1. Where are you currently working?

1. Hudsonville Body Carstar
2. Alpine Collision Center
3. Woodys Auto Body
4. JACC
5. Grant Motor Supply - NAPA Jobber
6. CASS Collision
7. Disabled/Self-employed
8. Brighton Ford - Mercury
9. Self-employed
10. Daleiden's Inc.
11. Freedom Chevrolet - Pontiac
12. Pro Auto Body
13. Altira Products Supply Inc.
14. Rudyard collision
15. Retired from GM
16. EM Ind.Troy MI
17. G&K Enterprises
18. R.D. Eadler Const. & Develop. Corp.
19. Single Source Inc
20. Les Stanford Oldsmobile
21. EDS / GM
22. ASU Group Catastrophe & Temporary Services
23. Morristown Auto Body Inc.
24. Team One Chevy Olds.
25. BASF Corporation

Question 2. How long have you been employed there?

1. 1 year
2. 9 years
3. 4 yrs
4. 4.5 yrs
5. 3.5 yrs
6. 13 yrs
7. 24 yrs
8. 6 yrs
9. 32 yrs
10. 17 yrs
11. 0.5 yrs
12. 0.5 yrs
13. 13 yrs
14. 7 yrs
15. 28.5 yrs
16. 10 yrs
17. 15 yrs
18. 24 yrs
19. 3 yrs
20. 3 yrs
21. 3 yrs
22. 19 yrs
23. 19 yrs
24. 4 mo
25. 10 yrs

Question 3. What is your present position/title?

1. Auto Damage Consultant
2. Owner
3. Paint Technician
4. Auto Body Instructor
5. Counterman
6. Owner
7. Disabled
8. Auto-body Repair
9. Owner
10. Vice-President / Director of Shop Operations
11. Body - Paint tech
12. Repairman / Refinisher
13. President
14. Owner
15. Retired
16. Regional Sales Manager
17. Owner
18. President & CEO
19. Regional Director
20. Body Shop Manager
21. New Vehicle Damage
22. Vice President
23. Owner
24. Body Shop Manager
25. Technical Service Rep.

Question 4. What was your starting pay?

1. 40,000
2. 35,000
3. 18,000
4. 39,000
5. 6.00 hr
6. -
7. -
8. 1971 - 8,000
9. 5.00 hr
10. 7.00 hr
11. 7.00 hr
12. 460.00 per week gross
13. 45,000
14. -
15. 25,000
16. 29,000
17. -
18. unknown
19. 21,450 AHM degree
20. 21,000
21. 29,000
22. 16,000
23. 300.00 a week
24. 50% Commission
25. 43,000

Question 5. What is your current pay?

1. 40,000
2. 80,000 +
3. 35,000
4. Public Record
5. 8.00 hr
6. -
7. -
8. 75,000+
9. 35.00 hr
10. 50,000
11. 11.00 hr Flat rate
12. 470.00 per week gross
13. -------
14. -
15. 60,000+
16. 68,000
17. -
18. 50-80,000
19. 99,900
20. 40,000+
21. 32,000
22. Substantial
23. Pays tech 60-70,000 a yr
24. Salary
25. 65,000

Question 6. Was it difficult to fin a job when you graduated?

Responses	
Yes	No
1	24

Explain:

1. Had a job lined up prior to graduation.
2. There's a shortage of skilled people in this career field.
3. My first employer went to Ferris and hired me as soon as he found out I did.
4. -
5. Anytime I wished to work I found work or work found me! Please keep in mind I'm also a graduate of the Auto-service program & ASE certified & military veteran.
6. If you have desire & motivation any employer will hire you.
7. Self-employed
8. -
9. -
10. I had been working here through Coop in High School and breaks during College
11. It took me almost 2 months to find a job
12. A choice of two jobs waiting.
13. -
14. -

15. -
16. -
17. Interviews were set-up by Ferris with Auto-body Dealerships, Insurance Co.'s etc.
18. -
19. Already had job lined up in Junior year while in AHM program
20. I went into the AHT program for auto business mgt. And started in the work place as an adjuster.
21. -
22. What I learned at Ferris allowed me to enter the automotive field and then the insurance field.
23. There is a shortage of employees. Any good body man should be able to get a job immediately.
24. -
25. It was not difficult to find a job, but it did take a long time to find a good paying job. From 1974 to 1982 was a very difficult time for the auto body industry.

Question 7. Which phase of your on-campus education (courses, auto-body lab) was most valuable in preparing you for work?

1. Auto-body lab
2. Unibody collision repair - heavy hits. However there weren't very many. Fortunately Mr. Edgerly worked to keep at least one in process.
3. Auto Body Lab
4. What ever Mr. Unger taught was valuable. Probably whatever semesters that emphasized bump-work and sheet metal replacement were the most relevant.
5. Mostly lab work in the shop - back then I believe the program was set-up as 4-hr lab with 1-hr lecture.
6. A little of each.
7. Auto-body lab
8. All of them.
9. On the job lab training.
10. Auto-body lab - hands on environment
11. Lab's
12. Auto-body lab & Lecture welding
13. Auto-body Lab
14. Auto-body Labs 1. Gary Edgerly- most important
15. Arc Welding, Because of my knowledge I became a welding instructor at MOTT College for a semester. GM hired me as a skills trades instructor.
16. First job Sikkens was auto-paint experience
17. Auto-body lab
18. All-phases
19. Auto Body Lab - No amount of time in the lab could adequately prepare you for the reality of the real world in today's productive facilities...
20. All phases where helpful
21. Received most starting experience from AHM currently using estimating and repair techniques in current position.
22. The combination of hands on and the business classes
23. The complete program.
24. All of them related to auto repair
25. The entire program was important. The industry to this day needs good auto body technicians and they are hard to find.

Question 8. Based upon your course work at Ferris, which of the ASE/Michigan certification areas were you able to obtain?

Painting and Refinishing	Non-structural analysis & damage repair	Structural analysis and damage repair	Mechanical and electrical components	Damage analysis and estimating
12	7	11	5	7

If not, please explain the area of concern.

Question 8.

2. I'm currently ASE master & my facility is I-Car Gold, unfortunately, the material taught during my studies was out dated, which was no help. This industry is/has changed faster than your course studies!
7. No State Certification was needed then.
8. No ASE at time of grad. Did certify later.
12. Unibody repair, Collision repair Mechanical
13. Have all
14. Certified in every aspect
15. N/A
18. In B/S business from 3-67 to 6-75 still restore and build rods in private garage
19. Never tested or applied

20 Only took two test but I am sure other certifications areas could be obtained.

21. have not tried or needed
22. went into the insurance field.
23. Did not have ASE in 76/77
24. I am ASE certified as Master Auto, Master Heavy Duty Truck, and Master Body & Paint

Question 9. How effective was your course work in preparing you for work?

1. Good.
2. Some. However I had almost 10 years in the field prior to attending.
3. Very good
4. It was OK. It laid out a good foundation for an entry level technician , though I remember a lot of shops at that time (1977) wanted O.J.T. experience and F.S.U. was not experience.
5. Very good, but the economy wasn't good at the time. So I went back to Ferris for the Auto-service.
6. 30% - 50%
7. Very
8. Very effective, but was just the beginning. It takes about 5 to 7 yrs to be pretty much rounded out.
9. Very good
10. Very effective, gave me a great base training
11. Average
12. Prepared me well for entering the trade.
13. Good
14. Excellent
15. I think the program should have an **apprenticeship** included in the program. It should be geared to work at a dealership or an auto-body shop. Quality, Time, Work.
16. -
17. In line with work ethics of the "70's"
18. Excellent
19. -

20. Very helpful
21. All very good, did not want to work in body-shop
22. -
23. Very effective
24. Very
25. Good

Should any changes be made?

1. Speed! More input on unibody damage, estimating skills, computer skills, math skills, organization skills.
2. Keep you focus on current technology and insurance company practices. The industry is/has moved into specialty areas, ie: Body/frame/ref. Few can be a jack of all trades any longer. Combination Tech's are a dying breed.
3. Student need to be taught that they do not get paid until the job goes out the door Quality is very important but book-smarts alone will not put food on the table.
4. -
5. It's been too long ago since I took the course to even know what's being taught today...
6. Yes
7. No
8. I haven't seen or heard of the program in years. Good experienced Instructors are the key. Proper equipment is second.
9. Have technicians learn to write estimates with computers.
10. More course work in estimating try to push students to continue education past associates level-
11. A lot more I-Car training
12. I was satisfied for what I received back then.
13. Changes are being made at F.S.U. and Very Nice I might add. Your on target.
14. None
15. -
16. Auto-paint use more companies paint systems. Auto-body just keep up with what is the latest equip. used.
17. -
18. No
19. The challenge remains to prepare young women & men with entry level skills utilizing today's technology & applications...
20. -
21. -
22. one semester coop in a body-shop
23. do not know what college is teaching today graduated 1977
24. -
25. More courses on starting your own business.

Question 10. How effective was your auto-body lab experience in preparing you for work?

1. Good, good job Mr. Edgerly.
2. Fair.
3. Ferris is the best School in the state as far as that goes.
4. It was OK for the time. It gave a decent overall perspective of the field, body-man, painter, frame-man etc.
5. I feel any and all "hands on" experience is the best teacher... You learn only background info in books, lectures, etc.
6. Somewhat
7. Very effective
8. Very effective all aspects of auto-body repair should be covered.

9. Great
10. Best part of course work
11. Average
12. Gave me most of the basics.
13. Great
14. Excellent
15. Yes connect a teaching degree program
16. For first job selling refinishing paint it was really just the paint experience.
17. In line with repairing of autos at that time
18. Good
19. To slow - to many project vehicles not enough customer pay work.
20. Very-Very effective couldn't do it with out it!!
21. Use in personal life not on job.
22. -Very-
23. Very good
24. Very
25. It was good but could have been more in depth.

Should any changes be made?

1. Speed! Get I-Car and State Certification prior to graduation, and computer classes - can't emphasize that enough.
2. Let your students know what to really expect when they enter the work force.
3. Students need to know what it is really like in the real world.
4. Hopefully it's staying current with today's practices.
5. In the real world you fix cars. You must use solid background info in diagnosis & repair but you must apply it to the car.
6. Yes
7. No
8. ?
9. No
10. More structural diagnosis computerized wheel alignment and frame pulling
11. Work more with shark system, a lot more. Try to use other paint products other than PPG. Instructors need to research more into new products. When I got a job all the products were new and I never worked with them before.
12. Maybe a little more experience in weld on panel replacements quarter panels, rockers roofs etc
13. Think it one of the best programs around.
14. No
15. -
16. Probably not
17. -
18. No
19. More relevant production experience - the real world moves very fast if you hope to make a living at it!
20. -
21. -
22. ? its been several years since I went through the program.
23. ? Do not know what is presently offered
24. Stay up to date as I know you are.
25. More in depth study in the painting course. (Chemical make up spectrophotometer and testing of paint.)

Question 11. Was the technological equipment used in your courses and service work up to date?

1. At the time of my graduation (1980). Now I hope you are teaching about computers, electrical, air bags, etc.
2. No.
3. Yes the equipment was great but technology changes everyday. Body lab needs to update regularly. Funds should be appropriated to maintain Ferris's excellence in this field. If you fall behind you accept second best.
4. Kind of old, even then.
5. At that time yes.
6. At that time it was.
7. Yes
8. At the time Yes.
9. At that time Yes
10. Yes, I have not been back so I do not know what it is now.
11. NO!
12. Yes
13. At the time
14. Yes
15. Yes and Maybe
16. I think so
17. Yes
18. Yes
19. At the time yes! - It was up to date but was by no means progressive or leading edge as I think it should be.
20. Yes
21. More ids required on welding cutting and frame alignment.
22. When I attended yes
23. At the time it was.
24. Yes
25. At the time I took it was okay but with today's technology you could never have enough equipment to teach with.

Question 12. Are the computers you used and the computer skills you developed in the program useful on the job? Shark measuring system, PPG paint system.

1. Didn't apply in 1980, a must in 1999!
2. N/A at time of study.
3. Yes. PPG is pretty much standard but students should be exposed to other systems as many shops don't use PPG.
4. N/A
5. No computers at that time. I believe we shot Dupont at the time?
6. We were never taught on computers.
7. No computers were used back in the 1960's.
8. Did not have such things then.
9. There was none 32 years ago
10. Had none when I was there.
11. Neither are helpful. My shop has a shark but I was not exposed to it enough to know it. We don't even have a PPG system we use Dupont which I had never been exposed to.
12. This did not apply back then.
13. Think it's a help
14. None at the time

15. Unknown
16. We didn't have
17. Was not available at time
18. Did not have at the time I was at Ferris
19. No computers in 1984/85 & no paint system.
20. From when I graduated to now it has changed - of course
21. -
22. Not in the program when I attended
23. There was no computer in programs in 1976/77
24. Did not apply
25. We (I) did not have computers when I went to school, but not only does PPG have a paint measuring systems but so does BASF Sikkens etc.

Question 13. If you were to return to school for a Bachelor's degree, would you consider Ferris?

	Responses	
Yes	?	No
19	3	3

Please explain:
1. Great campus atmosphere close to my home town (Grand Rapids). Met close friends there I still keep in touch with.
2. Unless things have changed, I feel that you're out of touch with the "real world".
3. If I were to return to school I would want to continue where I left off.
4. I did, good school also credits for program can serve as building blocks for another related program.
5. Might want to someday return for Auto Management type classes - once known as A.H.T. (What happened to fuels and lubes class)
6. Don't need to.
7. -
8. -
9. I learned a great deal from my training
10. Yes it is closer I am attending Davenport in pursuit of a bachelors in business management.
11. I think the classes are OK and I learn what I need to know I wasn't impressed with Ferris Labs.
12. Would return but not in my plans.
13. -
14. Should of stayed
15. Yes I tried but it was not acceptable because Auto-body was not accepted in to the Trade Tech Program. Now too old little or no interest in it now. Cost to much money for any value for me.
16. No I already have my Bachelors from Ferris Business Administration.
17. Highly unlikely
18. -
19. Done, 1988 AHM
20. Only a few credits short
21. Already have AHM 1996
22. Went through AHT in 1977
23. I felt the program and the school were very good
24. -
25. I do have a bachelor's degree and yes I would go back to Ferris for my degree.

Question 14. What year did you graduate from the Automotive Body Program?

1. 1982
2. 1983
3. 1994
4. 1977
5. About 1979-80
6. 1971
7. 1966
8. 1971
9. 1964 or 1965 long time ago
10. 1985
11. 1998
12. 1969
13. 1978
14. 1983
15. 1968
16. 1980
17. 1973
18. 1967
19. 1985 A/B 1988 AHM
20. 1975 A/B 1977 AHT
21. 1994 A/B 1996 AHM
22. 1776
23. 1977
24. 1975
25. 1974

AUTO BODY PROGRAM RELATIVE TO YOUR WORK

Question: Please rate the relevance of the subject areas that you studied in the Auto Body Program to your work.

1998

	HIGHLY RELEVANT	RELEVANT	SOMEWHAT RELEVANT	NOT RELEVANT
Non-Structural Repair – Preparation	24	6		
Panel Replacement & Alignment	24	5	1	
Working with Trim & Hardware	14	14	1	
Metal Straightening	24	3	2	1
Using Body Fillers	19	9	1	1
Refinishing – Safety & Enviromental Practices	18	10		2
Understanding Automotive Finishes & Application	25	3	2	
Structural Repair – Frame Unibody	26	3		1
Front Wheel Alignment	15	9	3	3
Estimating – Analyzing Damage	21	4	4	1
OTHER:				
Computer Trouble Shooting	1			

Dear Ferris State University Alumnus:

All programs at Ferris State University are reviewed every five years. Part of the review process includes an Alumni Review.

The Ferris State University Automotive Body program faculty endeavors to provide you with a high quality two year automotive body degree. To be able to determine the effectiveness of our program and to meet your present and future needs, we need your assistance and input.

Your time and effort is greatly appreciated and is important to this process. If you have any questions please call Greg Key, Program Coordinator, Automotive Center at (616) 592-5981. Thank you.

Sincerely,

Greg Key, Program Coordinator
Automotive Service and Automotive Body

GK/jas

Enclosure: Alumni Survey

Ferris State University
Automotive Body Program
Survey of Graduates

1. Where are you Currentlyworking?_____
   Address:_____

2. How long have you been employed there?_____

3. What is your present position/job title?_____

4. What was your starting salary? $_____

5. What is your present salary? $_____

6. Was it difficult to find a job when you graduated? Yes____ No____
   Explain:

7. Which phase of your on-campus education (courses, auto-body lab) was most valuable in preparing you for work?

8. Based upon your course work at Ferris, which of the ASE/Michigan certification areas were you able to obtain? If not, please explain the area of concern.
   - PAINTING AND REFINISHING
   - NON STRUCTURAL ANALYSIS & DAMAGE REPAIR
   - STRUCTURAL ANALYSIS AND DAMAGE REPAIR
   - MECHANICAL AND ELECTRICAL COMPONENTS
   - DAMAGE ANALYSIS AND ESTIMATING

9. How effective was your course work in preparing you for work?

   _____

   Should any changes be made?

10. How effective was your auto-body lab experience in preparing you for work?

    Should any changes be made?

11. Was the technological equipment used in your courses and service work up to date?

12. Are the computers you used and the computer skills you developed in the program useful on the job? Shark measuring system, PPG paint system.

13. If you were to return to school for a Bachelor's degree, would you consider Ferris?

    Please explain:

14. What year did you graduate from the Automotive Body Program? _____

AUTO BODY PROGRAM RELATIVE TO YOUR WORK

Question: Please rate the relevance of the subject areas that you studied in the Auto Body Program to your work.

1998

	HIGHLY RELEVANT	RELEVANT	SOMEWHAT RELEVANT	NOT RELEVANT
Non-Structural Repair – Preparation				
Panel Replacement & Alignment				
Working with Trim & Hardware				
Metal Straightening				
Using Body Fillers				
Refinishing – Safety & Enviromental Practices				
Understanding Automotive Finishes & Application				
Structural Repair – Frame Unibody				
Front Wheel Alignment				
Estimating – Analyzing Damage				

SECTION THREE

AUTOMOTIVE BODY PROGRAM

EMPLOYER FOLLOW-UP

Question 1 Of the employer surveyed:

9 - Dealers
3 - Franchises
22 - Independent body shops
5 - Others

Question 2 When asked if they had hired graduates in the past:

19 - "Yes"
20 - "No"

Question 3 Over 90% of the employers said they were satisfied with the comprehensive technical level of the current program format.

Question 4 100% of employers surveyed said they would continue to hire graduates.

Question 5 When asked how many graduates they might hire per year:

1 - Would hire none
20 - Would hire 1 to 2
2 - Would hire 2
3 - Would hire 5 or more

Question 6 The type of work employees wold be asked to perform were numerous including:

Body Work
Paint Work
Frame and Unibody Repair
Estimating
Sales
Mechanical Repairs

Question 7 The most essential technical courses employers consider were:

Panel replacement
Alignment
Automotive finishes and applications

Next, they wanted the employees trained in:

Frame and unibody repair
Metal Straightening

Followed by:

Safety and environmental practices.

Question 8 Employers ranked English and computer literacy as the two most important general education courses.

These courses were followed by math, technical writing, psychology, speech, physics and history.

Question 9 Starting salaries averaged in the $25,000 per year range.
Starting salaries ranged from $15,000 to over $30,000 per year.

Question 10 Employers believe that technicians have a salary growth potential of $50,000 to $100,000 per year, depending on their aggressiveness, motivation and technical skills.

Question 11 87% of employers predicted earnings of over $30,000 per year after 5 years in the field.

Question 12 Nearly all employers surveyed indicated a large need for employees. Some of the comments made were:

"There is a definite growing need."
"As many as possible."
"Open Field."
"As many as you can train."
"Plenty of places to put good workers."
"All you have, more then you can produce."

Question 13 19 employers consider A.S.E. Certification necessary after hiring.
10 considered it necessary before hiring.
10 considered it unnecessary

Serving the needs of auto body shop owners and managers since 1960

November 1998

WMBA NEWSBEAT

A Message From The President.....

Here we are in November already. Time to get ready for snow, and time to convince everyone that no one involved with a body shop would go out and intentionally try and reduce the Michigan deer herd.

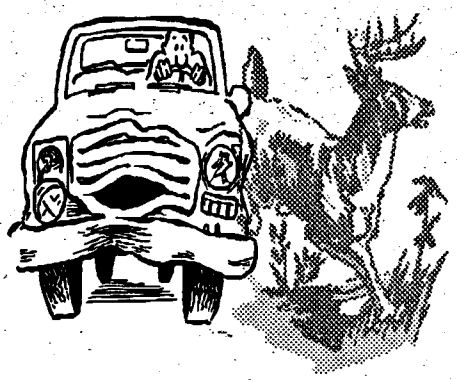
This month's meeting involves a variety of topics. First of all, Steve Schoon from Citizens Insurance will be introducing changes in the Express claims program, and filling us in on Citizens plans for the future and how they will affect all of us.

We will also have a short presentation by Bill Bridgeman on the Pyro Blanket. This was originally developed as a safety item, but has found many uses in the automotive industry. It may be a beneficial item to have in your shop.

There may also be a third presentation, but I'm not going to make any promises yet.

See everyone on the 17th.

Joe



THE PYRO BLANKET ...It's A Good Thing

A new product, developed for the safe rescue of children from fire emergencies, has found a home in body shops as well. It fills a void in the marketplace, offering lightweight, flexible fire and spark protection that current blanket offerings from 3-M, for instance, do not. A number of body shops have been putting the PYRO BLANKET through its paces in an informal test marketing of this locally produced (Grand Rapids) product. It has found application in protecting auto interiors, exteriors, and glass that may be exposed to welding spatter or grinding sparks.

The inventor, Bill Bridgeman, and professionals from Grand Haven based American Auto Color, Inc., Mike Stewart and Dick Dickman, will be presenting a variety of products made from a special patented 3-fiber blend on November 17, at our 7:30 pm meeting.

Your thoughts on the PYRO BLANKET and other products that can be derived from its fabric are welcome. Some members will be able to offer their appraisal of the product based on their own use during the last several weeks. Discovering its strengths and weaknesses are essential to Ponthomme Products, Inc., maker of the blankets. They are willing to prototype any type of special application our group of members thinks may be appropriate, and promise very competitive pricing. A videotape and product display will also be included in this presentation.

WMBA Christmas Party!!

December 8, 1998

6:30 pm - cash bar & hors d'oeuvres

7:30 - dinner

English Hills Country Club

(1200 Four Mile Rd NW)

Live Music with the Bob Nixon Trio

The Latest Minutes....

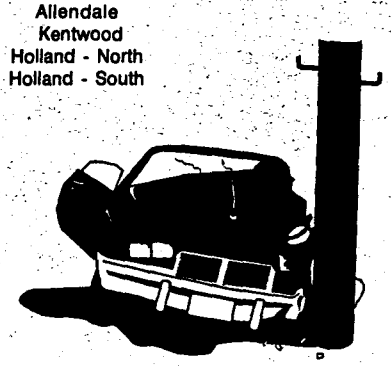
Our General Membership meeting for October 20, 1998 was called to order by President Joe Woodin at 8:05 pm. Joe opened by asking if anyone present hadn't voted for the board positions opening up for Vice-President and Secretary. For those that hadn't, Diane Rodenhouse handed out ballots. Joe then introduced the board members and had the minutes from the September 15, 1998 meeting accepted as written. Treasurer Jeff Shaffer announced that the Association has $27,429.07 in its checking account. For the Vice-President's report Diane reminded everyone to mark their calendars for December 8, 1998 for the Christmas Party, and said that everyone will be receiving their invitations soon. Diane also mentioned that they would be receiving a member survey, which will give them the opportunity to suggest topics for the Association to look at and possibly pursue... Following Diane, Joe asked Ray Fisher for an I-Car update. Ray informed the membership present that they had a good turnout for the finish matching class and their electronics class will be held October 6 and 7. Ray also mentioned the new requirements for Gold Class in 1999.

Joe introduced our guest speaker for the evening, Larry Edwards, from Edwards and Associates Consulting. Larry's focus for the evening was on "Managing Your Business Into the 21st Century." He explained how important a vision statement is, not only to the owner or upper management team but to every employee, regardless of their position. Larry handed out a work-sheet/outline which he stressed that everyone should work through. He said it's one thing to carry a goal in one's mind, but quite another to put it down on paper where you look at it every day, or your employees can see it everyday. Now the goal is visible and has a far greater chance of becoming reality. If everyone sees the common goal they tend to work closer together to achieve it. Larry also touched on what it takes as a person to manage your business, like attitude. He went on the say that something as simple as answering the phone can either make a sale or send them to your competitor. Larry shared his views on consolidation and feels it's natural that our industry evolves to it, as many others already have. He went on to say that it won't be the end of the independent repair shop, but it will certainly change the way business is done. The days of taking a box full of tools, a two-stall garage and building your own business are gone. Consolidators will make the price of entry too high for the average person! Larry then shared a few ways that shops can improve their profits, and the importance of having a solid cash flow to sustain. He went on to say that when the business begins to lose sight of the customer's wants and needs, is usually when they begin to die. In closing, Larry offered his professional assistance by calling (800) 979-9904.

(continued)

1998 Paid Members

ATEG
Action Truck & Auto
Alpine Collision Center
Altra Products
Arnie's Auto Glass
Auto Body Center
Auto Boutique
Auto Care Experts
Auto Glass Specialists
Auto Wares
Baker Auto Parts
Berger Chev. Body Shop
Betten Nissan Muskegon
Bob's Collision Service
Borgman Ford
Brinks Auto Body
Burton Heights Body
Cedar Body Shop
Clinton Hop & Co.
Cole Gilmore Pontiac
Collision Connection
Complete Glass Service
Comstock Park Body
Courtesy Dodge
Crown Motors Limited
Dubois Collision
Duthler Ford Body Shop
Duthler Truck
Eagle Automotive
Elhart Pontiac Collision
Enterprise Car Rental
Family Auto Center
Ferris State University
FinishMaster
GI Body Shop
Gezon Motors Body Shop
Godwin Heights Body
Gomer, Ken - BASF
Grand Rapids Auto Parts
Grand Oldsmobile
Henderson Glass
Hansen Collision
Allendale
Kentwood
Holland - North
Holland - South
Harvey Cadillac
Highland Chrysler
Hudsonville Body Shop
Impact Body Shop
Jerry's Body Shop
John & Sons
Judd's Body Shop
K & M Northfield Dodge
Kenowa Auto Supply
Koenes Auto Body
Kosters Body Shop
Lakeview Car Centre
Lamb Inc.
M.C.U. Body Shop
Marz Auto Body
Mitchell-Terry Russell
Midwest Bumper Co.
Nyenhuis Body Shoop
Ottawa CarStar Collision
Perfect Products
Pfeiffer Collision
Premier Autoware Co.
Pro Collision of W. Michigan
Riverbend Body Shop
Robinson Body Shop
Rodenhouse Body Shop
Russell Terry
Schut's Body Shop
Scott's Body Shop
Sherwin Williams
Single Source
South Kent Frame & Alignment
Sports Car Specialties
Star Collision North
TJ's Collision
The Shop Body Shop
Veneklasen Auto Parts
Village Auto Body
Vos Glass
Wealthy Body Shop
Weller Auto Parts



1998 I-CAR Update

Committee Members for 1998-99:

Leo Maki (State Chair)	532-8260
Ray Fisher (Dist. Chair)	452-2143 x260
Scott Baker	940-8950
Beena Chandran	954-1404
Tracy Dragseth	954-1404
Joe Erb	954-1404
Cam Hultman	954-1404
Tony Huver	364-7770
Doug Jones	949-5200
Bruce Lack	(517) 322-7900
Tom Lovell	364-6222
John Morris	942-2827
Paul Roon	532-8260
Scott Sarver	530-9191 x284
James VanDam	954-1404

Thank you committee members for your continued support

ANYONE INTERESTED IN JOINING I-CAR?
Contact Ray Fisher at
452-2143 ext. 260

I-CAR CLASS SCHEDULE

GLASS CLASS
12/5
ABRA Auto - Lansing
Call Bruce Lack
(517) 322-7900
for registration forms

STEERING & SUSPENSION
1/16/99 - 8am

ADVANCED VEHICLE SYSTEMS
3/13/99 - 8am

ALUMINUM REPAIR, REPLACEMENT & WELDIN
3/23 - 6pm
3/24 - 6pm

MINUTES (continued)

Following Larry, Joe announced the new board members. Vice-President for 1999 will be Ray Fisher and Secretary for 1999 and 2000 is Scott Baker. Joe congratulated Ray and Scott as well as Cam Hultman, Doug Jones, and Jim Ruiter for running.

In New Business: Gene Hoisington announced that I-Car of West Michigan is looking for a new Chairperson for their golf o[illegible]ing.

Meeting adjourned at 9:45 pm.
Respectfully Submitted,
Steve Tomaszewski, Secretary

CLASSIFIED SECTION

Support These Advertisers - They Are Members and Your Friends

UPCOMING EVENTS

GENERAL MEMBERSHIP MEETING
November 17th

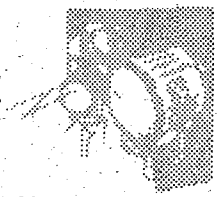
GUEST SPEAKERS:
Steve Schoon - Citizens Insurance Co.
"Express Claims Program"

Bill Bridgeman
"The Pyro Blanket"

WMBA CHRISTMAS PARTY!!
December 8
6:30 cash bar and hors d'oeuvres
7:30 dinner
English Hills Country Club

JUNE 14, 1999
ANNUAL GOLF OUTING
6/14/99

W.M.B.A. Spotlight



by Scott Baker

This month's WMBA Member Spotlight is John Workman. John has been in body shops working since the early 80's. He started out in the Auto Service area then joined the Army. After his army experience, he got an opportunity to work in a body shop. He then moved on to work on the insurance side, where he was an adjuster for several years. John is currently with Burton Heights Body Shop.

John has been married for 17 years and has a son (14) and a daughter (16), they keep everyone busy.

John enjoys the WMBA and feels the association helps him keep current in the industry. He enjoys the body business and the public people.

John is a member of the Byron Center Snowmobile Association and enjoys hitting the drifts. He is a member of Wesley Park Church, and volunteers his time when he can.

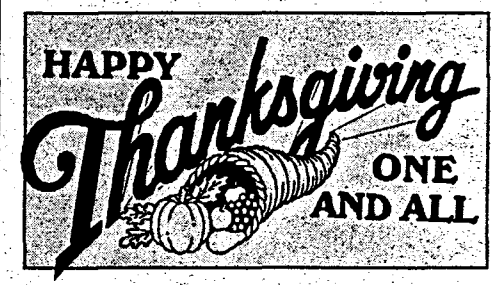
Thanks, John.

1998 BOARD OF DIRECTORS

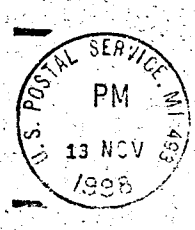
President
Joe Woodin, Cole Gilmore Collision . 321-9014
Vice-President
Diane Rodenhouse, Rodenhouse Body 453-4547
Treasurer
Jeff Shaffer, Pfeiffer Collision 940-8950
Secretary
Steve Tomaszewski, Alpine Collision Ctr.361-6646
Chairman
Dave Shustha, Pro Collision of W. MI . 791-4988

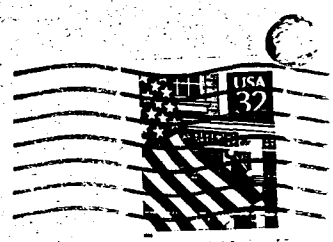
WMBA Committee Listing

Public Relations:
Scott Baker • Joanne Victory
Dan Williams • Jim Ruiter



WMBA
PO Box 2879
Grand Rapids, MI
49501-2879





Greg Key
Auto Center

JACK RICHARDS
FERRIS STATE UNIVERSITY
1009 CAMPUS DRIVE JHN 200
BIG RAPIDS, MI 49307-2280

Look Inside for
Latest I-CAR Update

Address Correction Requested

Employer Follow Up

Automotive Body Technician

Question 1. What type of service facility do you own/operate?

Dealer	Franchise	Independent	Other
9	3	22	5

Question 2. Have you hired any of our two-year graduates in the past years?

Yes - 19 No - 20

Question 3. Are you satisfied with the comprehensive technical level of the current program format and the "Curriculum Guide Sheet"?

Yes - 20 No - 2

Comments:

1. Would like more info
4. Should use I-Car guidelines
5. Fundamentals are good but lack in hands on & confidence.
6. I am not familiar with the curriculum guide sheet
7. Have never read it
8. -
9. ?
10. unable to tell by the time he stayed
18. Have not seen guide sheet
19. From what I've heard you are doing a good job.
23. somewhat - painter techs need to know more about rubbing cars & running a wheel
29. I have not seen the curriculum guide sheet
31. Glad to I-car used there it is helpful
5. ?
6. Would like to see more emphasis on Refinishing I.E. - blending, color matching, Gon set up

Question 4. Are you interested in continuing to hire these graduates in the future?

Yes - 33 No -

Comments:

2. Would like to hire two at this moment if we could find them
4. Must interview
5. Your 3 instructors are doing a great job, the grads that I have hired have great respect for Mr. Bigelow, Mr. Edgerly and Mr. Fowler!

6. N/A
11. probably
12. pointers (1)
13. I wish there were more!(3)
14. ?(5)
15. The school and program have become a very good resource for our shop (6)

Question 5. How many graduates might you hire per year?

None - 1 1 to 2 - 29 3 to 4 - 2 5 or more - 3

Question 6. What type of work would they perform?

1. Body work / paint work
2. All phases of Auto-body Repair
3. Auto body repair & paint
4. A combination from start to finish
5. Body work / painter's helper
6. All Phases - starting with paint prep
7. Collision Repair & Paint
8. Collision Repair & Paint
9. Full collision and paint
10. Auto body repair and refinishing
11. Estimates for insurance claims monitor repairs done by body shops
12. Collision, mechanical or refinish
13. All areas of mechanical repair
14. Repair and refinish
15. Sales
16. Body repair/ paint/ detail
17. Customer service / technician
18. Depends on skill level
19. Auto body repair and refinishing
20. Body helper, paint helper or detail work
21. Paint, body, frame, collision related mechanical
22. Open
23. Paint or Body
24. Body, frame, refinish
25. Body, paint
26. All
27. Collision repair & ref suspension
28. Paint tech / body tech / frame tech
29. Body / Paint / estimator
30. Body repair
31. Depends upon skill
32. General first two years
33. Auto body repair

34. this year(1)
35. ?

Question 7. What technical courses do you consider to be essential?

Non-Structural Prep.	25	Metal Straightening	33
Panel Replacement & alig.	37	Using Body Fillers	30
Working w/ Trim & Hardware	23	Front Wheel Aglinment	17
Structural Repair - Frame Unibody	34	Estimating - Analyzing Damage	23
Refinishing - Safety & Environmental Practices	29	Understanding Automotive Finishes & Application	37
Body Electrical & Air Conditioning	21	Other	4

Other:
4. Welding both mig & tig & I_Car Tech
15. Computer Skills
33. Time management education
1. Lite and structural

Question 8. What general education courses do you consider essential?

English	32	Speech	10	Math	27	Physics	7
Psychology	9	Computer Literacy	32	History	3	Technical Writing	14
Other	4						

Comments:
4. Drafting
9. Anything to make a well rounded education
11. Communications
24. Ethic's work
29. Basic Business

Question 9. What would be the approximate yearly starting wage?

$ 15,000 to $ 20,000	11	$ 26,000 to $ 30,000	11
$ 21,000 to $ 25,000	14	Over $ 30,000	4

Question 10. What growth potential do you foresee for these graduates for these graduates?

1. It is up to them
2. If willing to work, we have techs that make $50,000 per year and up.
3. -
4. Depends on one abilities (some have it some don't)
5. -
6. The market is tight. They will have to be achievers it will be difficult for grads to open their own shop.
7. In our market body tech's can make $60,000 - painters 100,000
8. -
9. -
10. Good potential to aggressive individual (quality and efficient)
11. A sharp literate technician can rise to middle & upper management in the estimating field
12. Our industry needs people in all areas that are educated and qualified.
13. Depends on attitude and aptitude
14. Excellent opportunities
15. A lot wage packages to 100,000
16. Consistent - 5%/ yr.
17. Good
19. There is a great future for auto body repairman
23. lots not many trained techs out there
24. plenty of potential
25. The right person has a lot of potential
28. Average unless labor rates increase dramatically
29. Potential of 100k for a very good tech
31. Depends on their motivations
32. Unlimited
33. Depends totally on the individual (potential depends on person)
34. Very good (1)
36. (2)
37. Very good growth potential (3)
38. Very good if they are motivated (4)
39. (5)
40. unlimited (6)

Question 11. What would you predict to be the earning level after 5 years?

$ 15,000 to $ 20,000		$ 26,000 to $ 30,000	4
$ 21,000 to $ 25,000	1	Over $ 30,000	35

Question 12. How many of these graduates do you believe are necessary to fill the void in the market place?

1. Many, other shops we know are also looking for employees
2. There is a great need for techs in our area
3. 10
4. There is a definite growing need
5. As many as possible
6. Produce as many as possible - if they are good workers and they are willing to work and continue to take instruction.
7. Many many many
8. -
9. -
10. -
11. Unknown but there will always be a demand for people that are technicality and tactically sound.
12. Unknown nation wide
13. Open field
15. At present as many as you can get out
19. I don't know
20. Many more 100's
21. As many as you can train
23. more than are being trained
24. plenty of places to put good workers
25. All you have
27. A lot
28. Always a need
29. Many although I don't need people presently. I know of the need in the industry.
32. For West Michigan I would say about 40 over the next ten years.
33. All of them
34. Many good people men & women (1)
35. (2)
36. More then you can produce (3)
37. (4)
38. 10 a year (5)
39. (6)

Question 13. Do you consider ASE certification necessary?

No	10
Yes, before hiring	10
Yes, after hiring	19

September 2, 1999

Dear Ferris State University Alumnus Employer:

All programs at Ferris State University are reviewed every five years. Part of the review process includes an Alumni Review.

The Ferris State University Automotive Body program faculty endeavors to provide you with a high quality two year automotive body degree. To be able to determine the effectiveness of our program and to meet your present and future needs, we need your assistance and input.

Your time and effort is greatly appreciated and is important to this process. If you have any questions please call Greg Key, Program Coordinator, Automotive Center at (616) 592-5981. Thank you.

Sincerely,

Greg Key, Program Coordinator
Automotive Service and Automotive Body

GK/jas

Enclosure: Alumni Survey

AUTOMOTIVE BODY TECHNICIAN

Description: Students in the current automotive body program receive a comprehensive study of all ASE Collision Repair and Refinishing areas, and develop the necessary related diagnosing and servicing skills. With the completion of general education requirements, a two-year A.A.S. degree is awarded. Graduates are prepared to enter the automotive body industry or may continue their education and earn a B.S. degree in FSU offerings such as Automotive and Heavy Equipment Management.

1. ***What types of service facility do you own/operate?***

☐ Dealer ☐ Franchise

☐ Independent ☐

Other_____

2. ***Have you hired any of our two-year graduates in the past years?***

☐ Yes

☐ No

3. ***Are you satisfied with the comprehensive technical level of the current program format and the "Curriculum Guide Sheet"?***

☐ Yes

☐ No

☐

Comments_____

4. ***Are you interested in continuing to hire these graduates in the future?***

☐ Yes ☐ No

☐ Comments_____

_____

5. ***How many graduates might you hire per year?***

☐ None ☐ 3 to 4

☐ 1 to 2 ☐ 5 or more

6. ***What type of work would they perform?***_____

7. ***What technical courses do you consider to be essential?***

☐ NON-STRUCTURAL PREPARATION ☐ METAL STRAIGHTENING

☐ PANEL REPLACEMENT & ALIGNMENT ☐ USING BODY FILLERS

☐ WORKING WITH TRIM & HARDWARE ☐ FRONT WHEEL ALIGNMENT

☐ STRUCTURAL REPAIR – FRAME UNIBODY ☐ ESTIMATING – ANALYZING DAMAGE

☐ REFINISHING – SAFETY & ENVIROMENTAL PRACTICES

☐ UNDERSTANDING AUTOMOTIVE FINISHES & APPLICATION

☐ BODY ELECTRICAL & AIR CONDITIONING

☐ OTHER_____

8. ***What general education courses do you consider essential?***

☐ English ☐ Speech ☐ Math ☐ Physics ☐ Psychology

☐ Computer Literacy ☐ History ☐ Technical Writing

☐ Other (specify)_____

9. ***What would be the approximate yearly starting wage?***

☐ $15,000 to $20,000 ☐ $26,000 to $30,000

☐ $21,000 to $25,000 ☐ Over $30,000

10. ***What growth potential do you foresee for these graduates?***

_____

_____

11. ***What would you predict to be the earning level after 5 years?***

☐ $30,000 to $35,000 ☐ $43,000 to $50,000

☐ $36,000 to $42,000 ☐ Over $50,000

12. How many of these graduates do you believe are necessary to fill the void in the market place?

_____

_____

13. Do you consider ASE certification necessary?

- ☐ No
- ☐ Yes, before hiring
- ☐ Yes, after hiring

SECTION 4

AUTOMOTIVE BODY TECHNOLOGY

STUDENT SURVEY REPORT

FALL 1998

PROGRAM REPRESENTED:

ABOD (AUTOMOTIVE BODY TECHNOLOGY)

SURVEY REPORT FORMAT:

This survey is broken into three areas. A brief overview of the survey area results will be covered as well as some student comments pertaining to each area.

THE THREE SURVEYED AREA ARE:

1. Professors
2. Curriculum/Instruction
3. Facilities/Equipment

PROFESSORS:

The heaviest survey responses pertaining to professors fell in the above average and average categories. There was a small sprinkling of responses in the excellent, below average and unacceptable categories. Many more responses fell in the excellent category than the below average or unacceptable category.

Generally the students feel their professors are knowledgeable, kind, courteous, organized, available for assistance.

CURRICULUM/INSTRUCTION:

Responses pertaining to curriculum and instruction were ranked from excellent to not applicable; However, most responses fell in the excellent, above average, and average categories with a few responses falling in the below average, unacceptable and not applicable rankings. Generally students are happy with the curriculum and instruction.

FACILITIES/EQUIPMENT TECHNOLOGY:

This portion covered: Classroom condition, building condition and custodial services, maintenance of tools and tool availability. All of these categories scored very well. Custodial services had 38 of its 42 responses in the average level or higher.

Overall, students are happy with the facilities and think that the custodial services are very good. Overall quality of the facilities and equipment received the majority of responses in the average or higher categories. The majority of responses regarding equipment technology also scored in the average or higher categories. Maintenance of equipment and tools also scored high.

SUMMARY:

Overall, students ranked the Automotive Body Technology Program very highly. The total number of responses percentages are as follows:

Rank	Number	Percent
(A) Category	261	21.6
(B) Category	404	33.3
© Category	430	35.5
(D) Category	99	8.1
(E) Category	15	1.2
(F) Category	2	.15

YOUR PROFESSORS

	A	B	C	D	E	F	
1	12	13	15	1	1		Are your professors kind, courteous and helpful to students?
2	12	16	12	2			Instructor's overall mastery of the subject matter.
3	7	17	14	4			Professor's organization of the course
4	8	10	18	4	1		Professor's organization of the course
5	10	10	15	6	1		Professor's stimulation of interest
6	8	13	15	6			Professor's availability for assistance
7	9	12	12	6	2	1	Professor's ability to advise on class schedules and other advisory duties
8	7	15	14	4	1		Professor's impartiality on grades and exams
9	12	10	19	1			Professor's concern for students
10	20	11	11	1			Professor's punctuality
11	16	13	10	2	1		Professor's professionalism in and out of class
12	9	14	16	2	1		Overall quality of your professor's instruction

YOUR INSTRUCTION

	A	B	C	D	E	F	
1	5	18	15	4			Quality of the material presented in class
2	10	13	12	5	1		Material presented meets up to date standards
3	7	14	13	6	2		Equipment quality and condition
4	6	15	17	4			Relevance of material presented
5	8	10	17	4	2		Media used to present material, i.e. white board, slides, video, overhead projectors, etc.
6	6	14	17	4		1	Difficulty of materials in reference to the course
7	2	21	17	1			Completeness of materials presented
8	4	14	22	2			Depth of material presented
9	9	16	14	4			Overall quality of auto body lab
10	8	15	17	1	1		Overall quality of instruction

FACILITIES AND EQUIPMENT

	A	B	C	D	E	F	
1	13	14	13	2			Classroom conditions
2	11	14	16	1			Building/Facility overall conditions
3	11	17	10	3			Custodial services
4	9	12	16	4			Maintenance of equipment and tools
5	7	17	12	5			Equipment technology up to date
6	6	13	13	8	1		Tool and equipment availability
7	9	13	18	2			Overall quality of facilities and equipment

KEY	
A =	EXCELLENT
B =	ABOVE AVERAGE
C =	AVERAGE
D =	BELOW AVERAGE
E =	UNACCEPTAB
F =	NOT APPLICABLE

SECTION 4

Automotive Body Technology
Student Survey Report

AUTOMOTIVE BODY FALL 1998
STUDENT SURVEY

Please answer all of the following questions truthfully and to the best of your ability. If you feel the question does not apply to you, or a question that you do not have an opinion on, please check the N/A box.

The survey is intended to rate your major courses only. Do not rate related courses such as English, Math, History, etc.

About you: Are you a

- Freshman ☐
- Sophomore ☐
- Junior ☐
- Senior ☐

Please rate the following questions:
A = Excellent
B = Above Average
C = Average
D = Below Average
E = Unacceptable
F = N/A (not applicable)

YOUR PROFESSORS

		A	B	C	D	E	F
1.	Are your professors kind, courteous and Helpful to students?	☐	☐	☐	☐	☐	☐
2.	Instructor's overall mastery of subject matter.	☐	☐	☐	☐	☐	☐
3.	Professor's organization of course.	☐	☐	☐	☐	☐	☐
4.	Professor's clarity of presentations.	☐	☐	☐	☐	☐	☐
5.	Professor's stimulation of interest.	☐	☐	☐	☐	☐	☐
6.	Professor's availability for assistance.	☐	☐	☐	☐	☐	☐
7.	Professor's ability to advise on class schedules and other advisory duties.	☐	☐	☐	☐	☐	☐
8.	Professor's impartiality on grades and exams.	☐	☐	☐	☐	☐	☐

9.	Professor's concern for students.	☐	☐	☐	☐	☐	☐
10.	Professor's punctuality.	☐	☐	☐	☐	☐	☐
11.	Professor's professionalism in and out of class.	☐	☐	☐	☐	☐	☐
12.	Overall quality of your professor's instruction.	☐	☐	☐	☐	☐	☐

YOUR INSTRUCTION

		A	B	C	D	E	F
1.	Quality of the material presented in class.	☐	☐	☐	☐	☐	☐
2.	Material presented meets up to date standards.	☐	☐	☐	☐	☐	☐
3.	Equipment quality and condition.	☐	☐	☐	☐	☐	☐
4.	Relevance of material presented.	☐	☐	☐	☐	☐	☐
5.	Media used to present material, i.e., white Board, slides, video, overhead projectors, etc.	☐	☐	☐	☐	☐	☐
6.	Difficulty of material in reference to the level of the course.	☐	☐	☐	☐	☐	☐
7.	Completeness of material presented.	☐	☐	☐	☐	☐	☐
8.	Depth of material presented.	☐	☐	☐	☐	☐	☐
9.	Overall quality of auto body lab.	☐	☐	☐	☐	☐	☐
10.	Overall quality of instruction.	☐	☐	☐	☐	☐	☐

FACILITIES AND EQUIPMENT

		A	B	C	D	E	F
1.	Classroom conditions.	☐	☐	☐	☐	☐	☐
2.	Building/Facility overall conditions.	☐	☐	☐	☐	☐	☐
3.	Custodial services.	☐	☐	☐	☐	☐	☐
4.	Maintenance of equipment and tools.	☐	☐	☐	☐	☐	☐
5.	Equipment technology up to date.	☐	☐	☐	☐	☐	☐
6.	Tool and equipment availability.	☐	☐	☐	☐	☐	☐
7.	Overall quality of facilities and equipment.	☐	☐	☐	☐	☐	☐

SECTION FIVE

AUTOMOTIVE BODY PROGRAM

FACULTY PERCEPTION OF PROGRAM

FACULTY PERCEPTIONS OF OCCUPATIONAL EDUCATION PROGRAMS

A	B	C	D	E	F	
		1	2			Participation in Development of College Occupational Education Program Plan
			1	2		Program Goals
				3		Course Objectives
			3			Competency Based Performance Objectives
		1	2			Use of Competency Based Objectives
		1		2		Use of Information on Labor Market Needs
			1	2		Use of Information on Job Performance Requirements
			1	2		Use of Profession/Industry Standards
		2	1			Use of Student Follow-up Information
				3		Adaptation of Instruction
			2	1		Relevance of Supportive Courses
		2	1			Coordination with Other Community Agencies and Educational Programs.
2	1					Provision for Work Experience, Cooperative Education or Clinical Experience.
				5		Program Availability and Accessibility
		1	2			Provison for the Disadvantage
		2			1	Provision for the Handicapped
		1	1	1		Efforts to Achieve Sex Equity
			1	2		Provision for Program Advisement
			2	1		Provsion for Career Planning and Guidance
			1	2		Adequacy of Career Planning and Guidance
			2	1		Provision for Employability Information
		1	2			Placement Effectiveness for Students in this Program
	1	1	1			Student Follow-up System
	2	1				Promotion of this Occupational Program
			3			Provision for leadership and Coordination
			2	1		Qualifications of Adminstrators and/or Supervisors
			1	2		Instructional Staffing
				3		Qualifications of Instructional Staff
		2		1		Professional Development Opportunities
1	1				1	Use of Instructional Support Staff
		1	1	1		Use of Clerical Suport Staff
			2	1		Adequacy and Availability of Instructional Equipment
			3			Maintenance and Safety of Instructional Equipment
		1		2		Adequacy of Instructional Facilities
			2	1		Scheduling of Instructional Facilities
		2	1			Adequacy and Availability of Instructional Materials and Supplies
		1	1	1		Adequacy and Availability of Learning Resources
		3		1		Use of Advisory Committees
	3					Provisions of Current Operating Budget
	3					Provisions in Capital Outlay Budget of Equipment

		KEY			
A=	Poor				
B=	Below Expectations				
C=	Acceptable				
D=	Good				
E=	Excellent				
F=	Don't Know				

PROE

Michigan Community Colleges

FACULTY PERCEPTIONS OF OCCUPATIONAL EDUCATION PROGRAMS

		Keypunch Instructions	Poor 1	Below Expectations 2	Acceptable 3	Good 4	Excellent 5	Don't Know	COMMENTS (Please note explanatory remarks or needs for improvement)
GOALS AND OBJECTIVES									
1. Participation in Development of College Occupational Education Program Plan *Excellent*—Administrators and/or other supervisory personnel involved in developing and revising the college plan for this occupational program seek and respond to faculty, student and community input. *Poor*—Development of the plan for this program is basically the work of one or two persons in the college.	1					X			
2. Program Goals *Excellent*—Written goals for this program state realistic outcomes (such as planned enrollments, completions, placements) and are used as one measure of program effectiveness. *Poor*—No written goals exist for this program.	2						X		
3. Course Objectives *Excellent*—Written measurable objectives have been developed for all occupational courses in this program and are used to plan and organize instruction. *Poor*—No written objectives have been developed for courses in this program.	3						X		
4. Competency Based Performance Objectives *Excellent*—Competency based performance objectives are on file in writing, consistent with employment standards, and tell students what to expect and help faculty pace instruction. *Poor*—Competency based performance objectives have not been developed for courses in this program.	4					X	X		
5. Use of Competency Based Performance Objectives *Excellent*—Competency based performance objectives are distributed to students and used to assess student progress. *Poor*—Competency based performance objectives are not used with students for progress evaluation nor are students aware that they exist.	5					X			
6. Use of Information on Labor Market Needs *Excellent*—Current data on labor market needs and emerging trends in job openings are systematically used in developing and evaluating this program. *Poor*—Labor market data is not used in planning or evaluation.	6						X		
7. Use of Information on Job Performance Requirements *Excellent*—Current data on job performance requirements and trends are systematically used in developing and evaluating this program and content of its courses. *Poor*—Job performance requirements information has not been collected for use in planning and evaluating.	7						X		

PROE

Michigan Community Colleges

FACULTY PERCEPTIONS OF OCCUPATIONAL EDUCATION PROGRAMS

		Keypunch Instructions	Poor 1	Below Expectations 2	Acceptable 3	Good 4	Excellent 5	Don't Know	COMMENTS (Please note explanatory remarks or needs for improvement)
GOALS AND OBJECTIVES (Continued)									
8. Use of Profession/Industry Standards *Excellent*—Profession/industry standards (such as licensing, certification, accreditation) are consistently used in planning and evaluating this program and content of its courses. *Poor*—Little or no recognition is given to specific profession/industry standards in planning and evaluating this program.	8						X		
9. Use of Student Follow-Up Information *Excellent*—Current follow-up data on completers and leavers (students with marketable skills) are consistently and systematically used in evaluating this program. *Poor*—Student follow-up information has not been collected for use in evaluating this program.	9				X				
PROCESSES									
10. Adaptation of Instruction *Excellent*—Instruction in all courses required for this program recognizes and responds to individual student interests, learning styles, skills, and abilities through a variety of instructional methods (such as small group or individualized instruction, laboratory or "hands on" experiences, open entry/open exit, credit by examination). *Poor*—Instructional approaches in this program do not consider individual student differences.	10					X			
11. Relevance of Supportive Courses *Excellent*—Applicable supportive courses (such as anatomy and physiology, technical communications, technical mathematics) are closely coordinated with this program and are kept relevant to program goals and current to the needs of students. *Poor*—Supportive course content reflects no planned approach to meeting needs of students in this program.	11					X			
12. Coordination with Other Community Agencies and Educational Programs. *Excellent*—Effective liaison is maintained with other programs and educational agencies and institutions (such as high schools, other community colleges, four year colleges, area vocational schools, proprietary schools, CETA) to assure a coordinated approach and to avoid duplication in meeting occupational needs of the area or community. *Poor*—College activities reflect a disinterest in coordination with other programs and agencies having impact on this program.	12				X				
13. Provision for Work Experience, Cooperative Education or Clinical Experience. *Excellent*—Ample opportunities are provided for related work experience, cooperative education, or clinical experience for students in this program. Student participation is well coordinated with classroom instruction and employer supervision. *Poor*—Few opportunities are provided in this program for related work experience, cooperative education, or clinical experience where such participation is feasible.	13		X						

PROE

Michigan Community Colleges

FACULTY PERCEPTIONS OF OCCUPATIONAL EDUCATION PROGRAMS

Keypunch Instructions	1 Poor	2 Below Expectations	3 Acceptable	4 Good	5 Excellent	Don't Know	COMMENTS (Please note explan. remarks or needs for provement)

PROCESSES (Continued)

14. Program Availability and Accessibility — 14

Excellent—Students and potential students desiring enrollment in this program are identified through recruitment activities, treated equally in enrollment selection, and not discouraged by unrealistic prerequisites. The program is readily available and accessible at convenient times and locations.

Poor—This program is not available or accessible to most students seeking enrollment. Discriminatory selection procedures are practiced.

X

15. Provision for the Disadvantaged — 15

Excellent—Support services are provided for disadvantaged (such as socioeconomic, cultural, linguistic, academic) students enrolled in this program. Services are coordinated with occupational instruction and results are assessed continuously.

Poor—No support services are provided for disadvantaged students enrolled in this program.

X

16. Provision for the Handicapped. — 16

Excellent—Support services are provided for handicapped (physical, mental, emotional, and other health impairing handicaps) students enrolled in this program. Facilities and equipment adaptations are made as needed. Services and facilities modifications are coordinated with occupational instruction and results are assessed continuously.

Poor—No support services or facilities and equipment modifications are available for handicapped students enrolled in this program.

X

17. Efforts to Achieve Sex Equity — 17

Excellent—Emphasis is given to eliminating sex bias and sex stereotyping in this program: staffing, student recruitment, program advisement, and career counseling; access to and acceptance in programs; selection of curricular materials; instruction; job development and placement.

Poor—Almost no attention is directed toward achieving sex equity in this program.

X

18. Provision for Program Advisement — 18

Excellent—Instructors or other qualified personnel advise students (day, evening, weekend) on program and course selection. Registration procedures facilitate course selection and sequencing.

Poor—Instructors make no provision for advising students on course and program selection.

X

19. Provision for Career Planning and Guidance — 19

Excellent—Day, evening, and weekend students in this program have ready access to career planning and guidance services.

Poor—Little or no provision is made for career planning and guidance services for students enrolled in this program.

X

PROE

Michigan Community Colleges

FACULTY PERCEPTIONS OF OCCUPATIONAL EDUCATION PROGRAMS

	Keypunch Instructions	Poor 1	Below Expectations 2	Acceptable 3	Good 4	Excellent 5	Don't Know	COMMENTS (Please note explanatory remarks or needs for improvement)
PROCESSES (Continued)								
20. Adequacy of Career Planning and Guidance	20					X		
Excellent—Instructors or other qualified personnel providing career planning and guidance services have current and relevant occupational knowledge and use a variety of resources (such as printed materials, audiovisuals, job observation) to meet individual student career objectives. *Poor*—Career planning and guidance services are ineffective and staffed with personnel who have little occupational knowledge.								
21. Provision for Employability Information.	21					X		
Excellent—This program includes information which is valuable to students as employees (on such topics as employment opportunities and future potential, starting salary, benefits, responsibilities and rights). *Poor*—Almost no emphasis is placed on providing information important to students as employees.								
22. Placement Effectiveness for Students in this Program	22				X			
Excellent—The college has an effectively functioning system for locating jobs and coordinating placement for students in this program. *Poor*—The college has no system or an ineffective system for locating jobs and coordinating placement for occupational students enrolled in this program.								
23. Student Follow-up System	23		X					
Excellent—Success and failure of program leavers and completers are assessed through periodic follow-up studies. Information learned is made available to instructors, students, advisory committee members and others concerned (such as counselors) and is used to modify this program. *Poor*—No effort is made to follow up former students of this program.								
24. Promotion of this Occupational Program	24		X					
Excellent—An active and organized effort is made to inform the public and its representatives (such as news media, legislators, board, business community) of the importance of providing effective and comprehensive occupational education and specific training for this occupation to gain community support. *Poor*—There is no organized public information effort for this program.								
RESOURCES								
25. Provision for Leadership and Coordination	25				X			
Excellent—Responsibility, authority, and accountability for this program are clearly identified and assigned. Administrative effectiveness is achieved in planning, managing, and evaluating this program. *Poor*—There are no clearly defined lines of responsibility, authority, and accountability for this program.								

PROE

Michigan Community Colleges

FACULTY PERCEPTIONS OF OCCUPATIONAL EDUCATION PROGRAMS

		Keypunch Instructions	Poor 1	Below Expectations 2	Acceptable 3	Good 4	Excellent 5	Don't Know	COMMENTS (Please note explanatory remarks or needs for improvement)
RESOURCES (Continued)									
26. Qualifications of Administrators and/or Supervisors *Excellent*—All persons responsible for directing and coordinating this program demonstrate a high level of administrative ability. They are knowledgeable in and committed to occupational education. *Poor*—Persons responsible for directing and coordinating this program have little administrative training, education, and experience.	26					X			
27. Instructional Staffing *Excellent*—Instructional staffing for this program is sufficient to permit optimum program effectiveness (such as through enabling instructors to meet individual student needs, providing liaison with advisory committees, and assisting with placement and follow-up activities). *Poor*—Staffing is inadequate to meet the needs of this program effectively.	27						X		
28. Qualifications of Instructional Staff *Excellent*—Instructors in this program have two or more years in relevant employment experience, have kept current in their field, and have developed and maintained a high level of teaching competence. *Poor*—Few instructors in this program have relevant employment experience or current competence in their field.	28						X		
29. Professional Development Opportunities *Excellent*—The college encourages and supports the continuing professional development of faculty through such opportunities as conference attendance, curriculum development, work experience. *Poor*—The college does not encourage or support professional development of faculty.	29						X		
30. Use of Instructional Support Staff *Excellent*—Paraprofessionals (such as aides, laboratory assistants) are used when appropriate to provide classroom help to students and to ensure maximum effectiveness of instructors in the program. *Poor*—Little use is made of instructional support staff in this program.	30							X	
31. Use of Clerical Support Staff *Excellent*—Office and clerical assistance is available to instructors in this program and used to ensure maximum effectiveness of instructors. *Poor*—Little or no office and clerical assistance is available to instructors; ineffective use is made of clerical support staff.	31					X			
32. Adequacy and Availability of Instructional Equipment. *Excellent*—Equipment used on or off campus for this program is current, representative of that used on jobs for which students are being trained, and in sufficient supply to meet the needs of students. *Poor*—Equipment for this program is outmoded and in insufficient quantity to support quality instruction.	32						X		

PROE

Michigan Community Colleges

FACULTY PERCEPTIONS OF OCCUPATIONAL EDUCATION PROGRAMS

Keypunch Instructions	1 Poor	2 Below Expectations	3 Acceptable	4 Good	5 Excellent	Don't Know	COMMENTS (Please note explanat. remarks or needs for improvement)
RESOURCES (Continued)							
33. Maintenance and Safety of Instructional Equipment *Excellent*—Equipment used for this program is operational, safe, and well maintained. *Poor*—Equipment used for this program is often not operable and is unsafe. 33				X			
34. Adequacy of Instructional Facilities *Excellent*—Instructional facilities (excluding equipment) meet the program objectives and student needs, are functional and provide maximum flexibility and safe working conditions. *Poor*—Facilities for this program generally are restrictive, disfunctional, or overcrowded. 34					X		
35. Scheduling of Instructional Facilities *Excellent*—Scheduling of facilities and equipment for this program is planned to maximize use and be consistent with quality instruction. *Poor*—Facilities and equipment for this program are significantly under- or over-scheduled. 35					X		
36. Adequacy and Availability of Instructional Materials and Supplies *Excellent*—Instructional materials and supplies are readily available and in sufficient quantity to support quality instruction. *Poor*—Materials and supplies in this program are limited in amount, generally outdated, and lack relevance to program and student needs. 36			X				
37. Adequacy and Availability of Learning Resources *Excellent*—Learning resources for this program are available and accessible to students, current and relevant to the occupation, and selected to avoid sex bias and stereotyping. *Poor*—Learning resources for this program are outdated, limited in quantity, and lack relevance to the occupation. 37					X		
38. Use of Advisory Committees *Excellent*—The advisory committee for this program is active and representative of the occupation. *Poor*—The advisory committee for this program is not representative of the occupation and rarely meets. 38			X		X		
39. Provisions in Current Operating Budget *Excellent*—Adequate funds are allocated in the college operating budget to support achievement of approved program objectives. Allocations are planned to consider instructor budget input. *Poor*—Funds provided are seriously inadequate in relation to approved objectives for this program. 39		X					
40. Provisions in Capital Outlay Budget for Equipment *Excellent*—Funds are allocated in a planned effort to provide for needed new equipment and for equipment replacement and repair, consistent with the objectives for this program and based on instructor input. *Poor*—Equipment needs in this program are almost totally unmet in the capital outlay budget. 40		X					

PROE

Michigan Community Colleges

FACULTY PERCEPTIONS OF OCCUPATIONAL EDUCATION PROGRAMS

	Keypunch Instructions	Poor 1	Below Expectations 2	Acceptable 3	Good 4	Excellent 5	Don't Know	COMMENTS (Please note explanatory remarks or needs for improvement)
GOALS AND OBJECTIVES								
1. Participation in Development of College Occupational Education Program Plan *Excellent*—Administrators and/or other supervisory personnel involved in developing and revising the college plan for this occupational program seek and respond to faculty, student and community input. *Poor*—Development of the plan for this program is basically the work of one or two persons in the college.	1			X				
2. Program Goals *Excellent*—Written goals for this program state realistic outcomes (such as planned enrollments, completions, placements) and are used as one measure of program effectiveness. *Poor*—No written goals exist for this program.	2				X			
3. Course Objectives *Excellent*—Written measurable objectives have been developed for all occupational courses in this program and are used to plan and organize instruction. *Poor*—No written objectives have been developed for courses in this program.	3					X		
4. Competency Based Performance Objectives *Excellent*—Competency based performance objectives are on file in writing, consistent with employment standards, and tell students what to expect and help faculty pace instruction. *Poor*—Competency based performance objectives have not been developed for courses in this program.	4				X			
5. Use of Competency Based Performance Objectives *Excellent*—Competency based performance objectives are distributed to students and used to assess student progress. *Poor*—Competency based performance objectives are not used with students for progress evaluation nor are students aware that they exist.	5			X				
6. Use of Information on Labor Market Needs *Excellent*—Current data on labor market needs and emerging trends in job openings are systematically used in developing and evaluating this program. *Poor*—Labor market data is not used in planning or evaluation.	6			X				
7. Use of Information on Job Performance Requirements *Excellent*—Current data on job performance requirements and trends are systematically used in developing and evaluating this program and content of its courses. *Poor*—Job performance requirements information has not been collected for use in planning and evaluating.	7				X			

PROE

Michigan Community Colleges

FACULTY PERCEPTIONS OF OCCUPATIONAL EDUCATION PROGRAMS

Keypunch Instructions	Poor	Below Expectations	Acceptable	Good	Excellent	Don't Know	COMMENTS (Please note explanatory remarks or needs for improvement)
	1	2	3	4	5		

GOALS AND OBJECTIVES (Continued)

8. Use of Profession/Industry Standards — 8

Excellent—Profession/industry standards (such as licensing, certification, accreditation) are consistently used in planning and evaluating this program and content of its courses.
Poor—Little or no recognition is given to specific profession/industry standards in planning and evaluating this program.

X in 4

9. Use of Student Follow-Up Information — 9

Excellent—Current follow-up data on completers and leavers (students with marketable skills) are consistently and systematically used in evaluating this program.
Poor—Student follow-up information has not been collected for use in evaluating this program.

X in 3

PROCESSES

10. Adaptation of Instruction — 10

Excellent—Instruction in all courses required for this program recognizes and responds to individual student interests, learning styles, skills, and abilities through a variety of instructional methods (such as small group or individualized instruction, laboratory or "hands on" experiences, open entry/open exit, credit by examination).
Poor—Instructional approaches in this program do not consider individual student differences.

X in 5

11. Relevance of Supportive Courses — 11

Excellent—Applicable supportive courses (such as anatomy and physiology, technical communications, technical mathematics) are closely coordinated with this program and are kept relevant to program goals and current to the needs of students.
Poor—Supportive course content reflects no planned approach to meeting needs of students in this program.

X in 4

12. Coordination with Other Community Agencies and Educational Programs. — 12

Excellent—Effective liaison is maintained with other programs and educational agencies and institutions (such as high schools, other community colleges, four year colleges, area vocational schools, proprietary schools, CETA) to assure a coordinated approach and to avoid duplication in meeting occupational needs of the area or community.
Poor—College activities reflect a disinterest in coordination with other programs and agencies having impact on this program.

X in 3

13. Provision for Work Experience, Cooperative Education or Clinical Experience. — 13

Excellent—Ample opportunities are provided for related work experience, cooperative education, or clinical experience for students in this program. Student participation is well coordinated with classroom instruction and employer supervision.
Poor—Few opportunities are provided in this program for related work experience, cooperative education, or clinical experience where such participation is feasible.

X in 1

PROE

Michigan Community Colleges

FACULTY PERCEPTIONS OF OCCUPATIONAL EDUCATION PROGRAMS

	Keypunch Instructions	Poor 1	Below Expectations 2	Acceptable 3	Good 4	Excellent 5	Don't Know	COMMENTS (Please note explanatory remarks or needs for improvement)
PROCESSES (Continued)								
14. Program Availability and Accessibility	14					X		
Excellent—Students and potential students desiring enrollment in this program are identified through recruitment activities, treated equally in enrollment selection, and not discouraged by unrealistic prerequisites. The program is readily available and accessible at convenient times and locations. *Poor*—This program is not available or accessible to most students seeking enrollment. Discriminatory selection procedures are practiced.								
15. Provision for the Disadvantaged	15			X				
Excellent—Support services are provided for disadvantaged (such as socioeconomic, cultural, linguistic, academic) students enrolled in this program. Services are coordinated with occupational instruction and results are assessed continuously. *Poor*—No support services are provided for disadvantaged students enrolled in this program.								
16. Provision for the Handicapped.	16			X				
Excellent—Support services are provided for handicapped (physical, mental, emotional, and other health impairing handicaps) students enrolled in this program. Facilities and equipment adaptations are made as needed. Services and facilities modifications are coordinated with occupational instruction and results are assessed continuously. *Poor*—No support services or facilities and equipment modifications are available for handicapped students enrolled in this program.								
17. Efforts to Achieve Sex Equity	17			X				
Excellent—Emphasis is given to eliminating sex bias and sex stereotyping in this program: staffing, student recruitment, program advisement, and career counseling; access to and acceptance in programs; selection of curricular materials; instruction; job development and placement. *Poor*—Almost no attention is directed toward achieving sex equity in this program.								
18. Provision for Program Advisement	18				X			
Excellent—Instructors or other qualified personnel advise students (day, evening, weekend) on program and course selection. Registration procedures facilitate course selection and sequencing. *Poor*—Instructors make no provision for advising students on course and program selection.								
19. Provision for Career Planning and Guidance	19				X			
Excellent—Day, evening, and weekend students in this program have ready access to career planning and guidance services. *Poor*—Little or no provision is made for career planning and guidance services for students enrolled in this program.								

PROE

Michigan Community Colleges

FACULTY PERCEPTIONS OF OCCUPATIONAL EDUCATION PROGRAMS

	Keypunch Instructions	Poor 1	Below Expectations 2	Acceptable 3	Good 4	Excellent 5	Don't Know	COMMENTS (Please note explanatory remarks or needs for improvement)
PROCESSES (Continued)								
20. Adequacy of Career Planning and Guidance *Excellent*—Instructors or other qualified personnel providing career planning and guidance services have current and relevant occupational knowledge and use a variety of resources (such as printed materials, audiovisuals, job observation) to meet individual student career objectives. *Poor*—Career planning and guidance services are ineffective and staffed with personnel who have little occupational knowledge.	20				X			
21. Provision for Employability Information. *Excellent*—This program includes information which is valuable to students as employees (on such topics as employment opportunities and future potential, starting salary, benefits, responsibilities and rights). *Poor*—Almost no emphasis is placed on providing information important to students as employees.	21				X			
22. Placement Effectiveness for Students in this Program *Excellent*—The college has an effectively functioning system for locating jobs and coordinating placement for students in this program. *Poor*—The college has no system or an ineffective system for locating jobs and coordinating placement for occupational students enrolled in this program.	22			X				
23. Student Follow-up System *Excellent*—Success and failure of program leavers and completers are assessed through periodic follow-up studies. Information learned is made available to instructors, students, advisory committee members and others concerned (such as counselors) and is used to modify this program. *Poor*—No effort is made to follow up former students of this program.	23			X				
24. Promotion of this Occupational Program *Excellent*—An active and organized effort is made to inform the public and its representatives (such as news media, legislators, board, business community) of the importance of providing effective and comprehensive occupational education and specific training for this occupation to gain community support. *Poor*—There is no organized public information effort for this program.	24		X					
RESOURCES								
25. Provision for Leadership and Coordination *Excellent*—Responsibility, authority, and accountability for this program are clearly identified and assigned. Administrative effectiveness is achieved in planning, managing, and evaluating this program. *Poor*—There are no clearly defined lines of responsibility, authority, and accountability for this program.	25				X			

PROE

Michigan Community Colleges

FACULTY PERCEPTIONS OF OCCUPATIONAL EDUCATION PROGRAMS

Keypunch Instructions	1 Poor	2 Below Expectations	3 Acceptable	4 Good	5 Excellent	Don't Know	COMMENTS (Please note explanatory remarks or needs for improvement)
RESOURCES (Continued)							
26. Qualifications of Administrators and/or Supervisors 26 *Excellent*—All persons responsible for directing and coordinating this program demonstrate a high level of administrative ability. They are knowledgeable in and committed to occupational education. *Poor*—Persons responsible for directing and coordinating this program have little administrative training, education, and experience.					X		
27. Instructional Staffing 27 *Excellent*—Instructional staffing for this program is sufficient to permit optimum program effectiveness (such as through enabling instructors to meet individual student needs, providing liaison with advisory committees, and assisting with placement and follow-up activities). *Poor*—Staffing is inadequate to meet the needs of this program effectively.					X		
28. Qualifications of Instructional Staff 28 *Excellent*—Instructors in this program have two or more years in relevant employment experience, have kept current in their field, and have developed and maintained a high level of teaching competence. *Poor*—Few instructors in this program have relevant employment experience or current competence in their field.					X		
29. Professional Development Opportunities 29 *Excellent*—The college encourages and supports the continuing professional development of faculty through such opportunities as conference attendance, curriculum development, work experience. *Poor*—The college does not encourage or support professional development of faculty.			X				
30. Use of Instructional Support Staff 30 *Excellent*—Paraprofessionals (such as aides, laboratory assistants) are used when appropriate to provide classroom help to students and to ensure maximum effectiveness of instructors in the program. *Poor*—Little use is made of instructional support staff in this program.	X						
31. Use of Clerical Support Staff 31 *Excellent*—Office and clerical assistance is available to instructors in this program and used to ensure maximum effectiveness of instructors. *Poor*—Little or no office and clerical assistance is available to instructors; ineffective use is made of clerical support staff.					X		
32. Adequacy and Availability of Instructional Equipment. 32 *Excellent*—Equipment used on or off campus for this program is current, representative of that used on jobs for which students are being trained, and in sufficient supply to meet the needs of students. *Poor*—Equipment for this program is outmoded and in insufficient quantity to support quality instruction.				X			

PROE

Michigan Community Colleges

FACULTY PERCEPTIONS OF OCCUPATIONAL EDUCATION PROGRAMS

		Keypunch Instructions	Poor 1	Below Expectations 2	Acceptable 3	Good 4	Excellent 5	Don't Know	COMMENTS (Please note explanatory remarks or needs for improvement)
RESOURCES (Continued)									
33. Maintenance and Safety of Instructional Equipment *Excellent*—Equipment used for this program is operational, safe, and well maintained. *Poor*—Equipment used for this program is often not operable and is unsafe.	33					X			
34. Adequacy of Instructional Facilities *Excellent*—Instructional facilities (excluding equipment) meet the program objectives and student needs, are functional and provide maximum flexibility and safe working conditions. *Poor*—Facilities for this program generally are restrictive, disfunctional, or overcrowded.	34				X				
35. Scheduling of Instructional Facilities *Excellent*—Scheduling of facilities and equipment for this program is planned to maximize use and be consistent with quality instruction. *Poor*—Facilities and equipment for this program are significantly under- or over-scheduled.	35					X			
36. Adequacy and Availability of Instructional Materials and Supplies *Excellent*—Instructional materials and supplies are readily available and in sufficient quantity to support quality instruction. *Poor*—Materials and supplies in this program are limited in amount, generally outdated, and lack relevance to program and student needs.	36					X			
37. Adequacy and Availability of Learning Resources *Excellent*—Learning resources for this program are available and accessible to students, current and relevant to the occupation, and selected to avoid sex bias and stereotyping. *Poor*—Learning resources for this program are outdated, limited in quantity, and lack relevance to the occupation.	37					X			
38. Use of Advisory Committees *Excellent*—The advisory committee for this program is active and representative of the occupation. *Poor*—The advisory committee for this program is not representative of the occupation and rarely meets.	38						X		
39. Provisions in Current Operating Budget *Excellent*—Adequate funds are allocated in the college operating budget to support achievement of approved program objectives. Allocations are planned to consider instructor budget input. *Poor*—Funds provided are seriously inadequate in relation to approved objectives for this program.	39			X					
40. Provisions in Capital Outlay Budget for Equipment *Excellent*—Funds are allocated in a planned effort to provide for needed new equipment and for equipment replacement and repair, consistent with the objectives for this program and based on instructor input. *Poor*—Equipment needs in this program are almost totally unmet in the capital outlay budget.	40			X					

PROE

Michigan Community Colleges

FACULTY PERCEPTIONS OF OCCUPATIONAL EDUCATION PROGRAMS

	Keypunch Instructions	Poor 1	Below Expectations 2	Acceptable 3	Good 4	Excellent 5	Don't Know	COMMENTS (Please note explanatory remarks or needs for improvement)
GOALS AND OBJECTIVES								
1. Participation in Development of College Occupational Education Program Plan 1 *Excellent*—Administrators and/or other supervisory personnel involved in developing and revising the college plan for this occupational program seek and respond to faculty, student and community input. *Poor*—Development of the plan for this program is basically the work of one or two persons in the college.					X			
2. Program Goals 2 *Excellent*—Written goals for this program state realistic outcomes (such as planned enrollments, completions, placements) and are used as one measure of program effectiveness. *Poor*—No written goals exist for this program.						X		
3. Course Objectives 3 *Excellent*—Written measurable objectives have been developed for all occupational courses in this program and are used to plan and organize instruction. *Poor*—No written objectives have been developed for courses in this program.						X		
4. Competency Based Performance Objectives 4 *Excellent*—Competency based performance objectives are on file in writing, consistent with employment standards, and tell students what to expect and help faculty pace instruction. *Poor*—Competency based performance objectives have not been developed for courses in this program.					X			
5. Use of Competency Based Performance Objectives 5 *Excellent*—Competency based performance objectives are distributed to students and used to assess student progress. *Poor*—Competency based performance objectives are not used with students for progress evaluation nor are students aware that they exist.					X			
6. Use of Information on Labor Market Needs 6 *Excellent*—Current data on labor market needs and emerging trends in job openings are systematically used in developing and evaluating this program. *Poor*—Labor market data is not used in planning or evaluation.						X		
7. Use of Information on Job Performance Requirements 7 *Excellent*—Current data on job performance requirements and trends are systematically used in developing and evaluating this program and content of its courses. *Poor*—Job performance requirements information has not been collected for use in planning and evaluating.						X		

PROE

Michigan Community Colleges

FACULTY PERCEPTIONS OF OCCUPATIONAL EDUCATION PROGRAMS

		Keypunch Instructions	Poor 1	Below Expectations 2	Acceptable 3	Good 4	Excellent 5	Don't Know	COMMENTS (Please note explanatory remarks or needs for improvement)
GOALS AND OBJECTIVES (Continued)									
8. Use of Profession/Industry Standards *Excellent*—Profession/industry standards (such as licensing, certification, accreditation) are consistently used in planning and evaluating this program and content of its courses. *Poor*—Little or no recognition is given to specific profession/industry standards in planning and evaluating this program.	8						X		
9. Use of Student Follow-Up Information *Excellent*—Current follow-up data on completers and leavers (students with marketable skills) are consistently and systematically used in evaluating this program. *Poor*—Student follow-up information has not been collected for use in evaluating this program.	9					X			
PROCESSES									
10. Adaptation of Instruction *Excellent*—Instruction in all courses required for this program recognizes and responds to individual student interests, learning styles, skills, and abilities through a variety of instructional methods (such as small group or individualized instruction, laboratory or "hands on" experiences, open entry/open exit, credit by examination). *Poor*—Instructional approaches in this program do not consider individual student differences.	10						X		
11. Relevance of Supportive Courses *Excellent*—Applicable supportive courses (such as anatomy and physiology, technical communications, technical mathematics) are closely coordinated with this program and are kept relevant to program goals and current to the needs of students. *Poor*—Supportive course content reflects no planned approach to meeting needs of students in this program.	11					X			
12. Coordination with Other Community Agencies and Educational Programs. *Excellent*—Effective liaison is maintained with other programs and educational agencies and institutions (such as high schools, other community colleges, four year colleges, area vocational schools, proprietary schools, CETA) to assure a coordinated approach and to avoid duplication in meeting occupational needs of the area or community. *Poor*—College activities reflect a disinterest in coordination with other programs and agencies having impact on this program.	12			X					
13. Provision for Work Experience, Cooperative Education or Clinical Experience. *Excellent*—Ample opportunities are provided for related work experience, cooperative education, or clinical experience for students in this program. Student participation is well coordinated with classroom instruction and employer supervision. *Poor*—Few opportunities are provided in this program for related work experience, cooperative education, or clinical experience where such participation is feasible.	13			X					

PROE

Michigan Community Colleges

FACULTY PERCEPTIONS OF OCCUPATIONAL EDUCATION PROGRAMS

PROCESSES (Continued)

	Keypunch Instructions	Poor 1	Below Expectations 2	Acceptable 3	Good 4	Excellent 5	Don't Know	COMMENTS (Please note explana remarks or needs for provement)
14. Program Availability and Accessibility — *Excellent*—Students and potential students desiring enrollment in this program are identified through recruitment activities, treated equally in enrollment selection, and not discouraged by unrealistic prerequisites. The program is readily available and accessible at convenient times and locations. *Poor*—This program is not available or accessible to most students seeking enrollment. Discriminatory selection procedures are practiced.	14				X	X		
15. Provision for the Disadvantaged — *Excellent*—Support services are provided for disadvantaged (such as socioeconomic, cultural, linguistic, academic) students enrolled in this program. Services are coordinated with occupational instruction and results are assessed continuously. *Poor*—No support services are provided for disadvantaged students enrolled in this program.	15				X			
16. Provision for the Handicapped. — *Excellent*—Support services are provided for handicapped (physical, mental, emotional, and other health impairing handicaps) students enrolled in this program. Facilities and equipment adaptations are made as needed. Services and facilities modifications are coordinated with occupational instruction and results are assessed continuously. *Poor*—No support services or facilities and equipment modifications are available for handicapped students enrolled in this program.	16			X				
17. Efforts to Achieve Sex Equity — *Excellent*—Emphasis is given to eliminating sex bias and sex stereotyping in this program: staffing, student recruitment, program advisement, and career counseling; access to and acceptance in programs; selection of curricular materials; instruction; job development and placement. *Poor*—Almost no attention is directed toward achieving sex equity in this program.	17				X			
18. Provision for Program Advisement — *Excellent*—Instructors or other qualified personnel advise students (day, evening, weekend) on program and course selection. Registration procedures facilitate course selection and sequencing. *Poor*—Instructors make no provision for advising students on course and program selection.	18				X			
19. Provision for Career Planning and Guidance — *Excellent*—Day, evening, and weekend students in this program have ready access to career planning and guidance services. *Poor*—Little or no provision is made for career planning and guidance services for students enrolled in this program.	19				X			

PROE

Michigan Community Colleges

FACULTY PERCEPTIONS OF OCCUPATIONAL EDUCATION PROGRAMS

	Keypunch Instructions	Poor 1	Below Expectations 2	Acceptable 3	Good 4	Excellent 5	Don't Know	COMMENTS (Please note explanatory remarks or needs for improvement)
PROCESSES (Continued)								
20. Adequacy of Career Planning and Guidance *Excellent*—Instructors or other qualified personnel providing career planning and guidance services have current and relevant occupational knowledge and use a variety of resources (such as printed materials, audiovisuals, job observation) to meet individual student career objectives. *Poor*—Career planning and guidance services are ineffective and staffed with personnel who have little occupational knowledge.	20					X		
21. Provision for Employability Information. *Excellent*—This program includes information which is valuable to students as employees (on such topics as employment opportunities and future potential, starting salary, benefits, responsibilities and rights). *Poor*—Almost no emphasis is placed on providing information important to students as employees.	21				X			
22. Placement Effectiveness for Students in this Program *Excellent*—The college has an effectively functioning system for locating jobs and coordinating placement for students in this program. *Poor*—The college has no system or an ineffective system for locating jobs and coordinating placement for occupational students enrolled in this program.	22				X			
23. Student Follow-up System *Excellent*—Success and failure of program leavers and completers are assessed through periodic follow-up studies. Information learned is made available to instructors, students, advisory committee members and others concerned (such as counselors) and is used to modify this program. *Poor*—No effort is made to follow up former students of this program.	23				X			
24. Promotion of this Occupational Program *Excellent*—An active and organized effort is made to inform the public and its representatives (such as news media, legislators, board, business community) of the importance of providing effective and comprehensive occupational education and specific training for this occupation to gain community support. *Poor*—There is no organized public information effort for this program.	24			X				
RESOURCES								
25. Provision for Leadership and Coordination *Excellent*—Responsibility, authority, and accountability for this program are clearly identified and assigned. Administrative effectiveness is achieved in planning, managing, and evaluating this program. *Poor*—There are no clearly defined lines of responsibility, authority, and accountability for this program.	25				X			

PROE

Michigan Community Colleges

FACULTY PERCEPTIONS OF OCCUPATIONAL EDUCATION PROGRAMS

Keypunch Instructions	Poor 1	Below Expectations 2	Acceptable 3	Good 4	Excellent 5	Don't Know	COMMENTS (Please note explanatory remarks or needs for improvement)

RESOURCES (Continued)

26. Qualifications of Administrators and/or Supervisors *Excellent*—All persons responsible for directing and coordinating this program demonstrate a high level of administrative ability. They are knowledgeable in and committed to occupational education. *Poor*—Persons responsible for directing and coordinating this program have little administrative training, education, and experience.	26				X			
27. Instructional Staffing *Excellent*—Instructional staffing for this program is sufficient to permit optimum program effectiveness (such as through enabling instructors to meet individual student needs, providing liaison with advisory committees, and assisting with placement and follow-up activities). *Poor*—Staffing is inadequate to meet the needs of this program effectively.	27				X			
28. Qualifications of Instructional Staff *Excellent*—Instructors in this program have two or more years in relevant employment experience, have kept current in their field, and have developed and maintained a high level of teaching competence. *Poor*—Few instructors in this program have relevant employment experience or current competence in their field.	28					X		
29. Professional Development Opportunities *Excellent*—The college encourages and supports the continuing professional development of faculty through such opportunities as conference attendance, curriculum development, work experience. *Poor*—The college does not encourage or support professional development of faculty.	29			X				
30. Use of Instructional Support Staff *Excellent*—Paraprofessionals (such as aides, laboratory assistants) are used when appropriate to provide classroom help to students and to ensure maximum effectiveness of instructors in the program. *Poor*—Little use is made of instructional support staff in this program.	30		X					
31. Use of Clerical Support Staff *Excellent*—Office and clerical assistance is available to instructors in this program and used to ensure maximum effectiveness of instructors. *Poor*—Little or no office and clerical assistance is available to instructors; ineffective use is made of clerical support staff.	31			X				
32. Adequacy and Availability of Instructional Equipment. *Excellent*—Equipment used on or off campus for this program is current, representative of that used on jobs for which students are being trained, and in sufficient supply to meet the needs of students. *Poor*—Equipment for this program is outmoded and in insufficient quantity to support quality instruction.	32				X			

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Michigan Community Colleges

FACULTY PERCEPTIONS OF OCCUPATIONAL EDUCATION PROGRAMS

		Keypunch Instructions	Poor 1	Below Expectations 2	Acceptable 3	Good 4	Excellent 5	Don't Know	COMMENTS (Please note explanatc remarks or needs for i: provement)
RESOURCES (Continued)									
33. Maintenance and Safety of Instructional Equipment *Excellent*—Equipment used for this program is operational, safe, and well maintained. *Poor*—Equipment used for this program is often not operable and is unsafe.	33					X			
34. Adequacy of Instructional Facilities *Excellent*—Instructional facilities (excluding equipment) meet the program objectives and student needs, are functional and provide maximum flexibility and safe working conditions. *Poor*—Facilities for this program generally are restrictive, disfunctional, or overcrowded.	34						X		
35. Scheduling of Instructional Facilities *Excellent*—Scheduling of facilities and equipment for this program is planned to maximize use and be consistent with quality instruction. *Poor*—Facilities and equipment for this program are significantly under- or over-scheduled.	35					X			
36. Adequacy and Availability of Instructional Materials and Supplies *Excellent*—Instructional materials and supplies are readily available and in sufficient quantity to support quality instruction. *Poor*—Materials and supplies in this program are limited in amount, generally outdated, and lack relevance to program and student needs.	36				X				
37. Adequacy and Availability of Learning Resources *Excellent*—Learning resources for this program are available and accessible to students, current and relevant to the occupation, and selected to avoid sex bias and stereotyping. *Poor*—Learning resources for this program are outdated, limited in quantity, and lack relevance to the occupation.	37				X				
38. Use of Advisory Committees *Excellent*—The advisory committee for this program is active and representative of the occupation. *Poor*—The advisory committee for this program is not representative of the occupation and rarely meets.	38				X				
39. Provisions in Current Operating Budget *Excellent*—Adequate funds are allocated in the college operating budget to support achievement of approved program objectives. Allocations are planned to consider instructor budget input. *Poor*—Funds provided are seriously inadequate in relation to approved objectives for this program.	39			X					
40. Provisions in Capital Outlay Budget for Equipment *Excellent*—Funds are allocated in a planned effort to provide for needed new equipment and for equipment replacement and repair, consistent with the objectives for this program and based on instructor input. *Poor*—Equipment needs in this program are almost totally unmet in the capital outlay budget.	40			X					

SECTION SIX

AUTOMOTIVE BODY PROGRAM

ADVISORY COMMITTEE SUMMARY OF SURVEY

Advisory Committee Summary of Survey

1.) The majority, 9 out of 12 advisory members, believe that the committee does not meet frequently enough.

2.) It was found from out Advisory Committee that it is difficult to duplicate actual "real world" atmosphere and repairs. However, it was also agreed upon that Auto Body has state of the art equipment which makes our graduates ore desirable for hire.

3.) Nine out of twelve advisors believe that our graduates are excellent prospective for employment. This can be contributed to the extensive training they receive form body repair to painting.

4.) Our advisory committee came from the Auto Body industry itself and are very familiar wit the needs and requirements to be successful.

5.) It was determined that our facilities are adequate for training, however it would be beneficial to be a bit larger.

6.) Even though Auto Body does have state of the art equipment the advisory committee felt some of it should be updated a little more frequently.

7.) Auto Body instructors do review there classes and update as needed that is evident to the committee.

8.) The advisory committee believe that their suggestions and comments are considered and used were applicable.

9.) Its viewed that the suggestions given to the Auto Body program are reviewed and implemented were possible.

10.) The advisory committee continues to believe that the long term employment of our graduates is extensive.

11.) It was determined that the Auto Body program strives to stay up-to-date with training and equipment. However its also viewed that there should be more co-op students and actual "Body Shop" experience. Get the students in a shop so they can see what's expected of them.

Auto Body Advisory Committee Survey

Question 1. The Advisory Committee meets often enough.

1= 9 2= 2 3= 1 4= 5=

Comments:
12. I would recommend that the advisory committee be provided with a list of discussion topics in advance of the meeting for preparation.

Question 2. The Automotive Body Program provides students with practical job application experience.

1= 3 2= 4 3= 5 4= 5=

Comments:
3. Very difficult to actually duplicate real world very good basic training.
5. Need more on the job applications
8. I am a past student, who believes this program is beneficial.
11. Students have practical job knowledge.

Question 3. The employment prospects for Automotive Body graduates are favorable upon completion of the program.

1= 9 2= 1 3= 2 4= 5=

Comments:
4. Need more painters
5. There is a huge need for auto body techs
8. Preparation from all three instructors is greatly beneficial for employment.
9. If some kind of communication with body shops throughout the state can make shop awards of students.
11.If they have some experience in a shop
12. Entry level positions are the graduates greatest opportunity- are they prepared to earn practical work experience before - they are provided higher paying lead tech. wages?

Question 4. The Advisory Committee members are knowledgeable about the Automotive Body Program.

1= 9 2= 3 3= 4= 5=

Comments:
8. Yes

Question 5. The physical facilities are adequate to support quality instruction.

1= 7 2= 6 3= 4= 5=

Comments:
5. As with current up dates is more of true shop conditions
8. Strongly agree

Question 6. The instructional equipment used is current and representative of what graduates will use on the job.

1= 4 2= 6 3= 2 4= 5=

Comments:
1. Not truly up to date
5. Equipment is a constant change in shops
8. I agree but some equipment should be updated to teach the latest techniques
12. Adequate- generally 3/5 years behind progressive shops.

Question 7. Classes are reviewed and revised to keep current with changing job practices and technology.

1= 5 2= 4 3= 3 4= 5=

Comments:
2. Weld class should be geared towards mig welding
6. Could use some research in various shop conditions
9. I feel each instructor should go to training once a year for any new updated material.
13. Hard to comment- need to review current course outlines.

Question 8. The Advisory Committee is adequately utilized by the program.

1= 6 2= 3 3= 3 4= 5=

Comments:
5. Have not participated with committee long enough to know.

Question 9. Suggestions from the Advisory Committee are encouraged and adopted by the program.

1= 5 2= 5 3= 2 4= 5=

Comments:

Question 10. Long term employment prospects remain extensive.

1= 8 2= 4 3= 4= 5=

Comments:
5. Need techs, large shortage of people
10. There is a big need for techs in this field

Question 11. From your perspective, what are the major strengths and weaknesses of the Automotive Body Program at Ferris State University.

Comments:

1. Need more real world repairable.
2. It gives the kids a chance to have hands on experience. It also helps them get experience in both coll. work and paint work. I think they should be pushed to get the cars done quicker during there last quarter.
3. Major strengths- students are introduced and able to learn the basics of Collision repair using state of the are equipment. Weakness- Unable to get the real world experiences due to different levels of training and abilities (there is no real solution/or this problem doing best we can with/activities available.
4. A good equipment shop for students.
5. Need to get more coop opportunities for students for this field back that I got from past students - real world application is so different from school that it is a tough transition.
6. The equipment & staff are real pluses. Weakness is demand for students and the lack of the amount that get out into the real shop settings.
7. The shops could use more lighting and the shop size is a little small, they could use more space to work and have more space for storage. A strength is the students are taught skills that make them very employable.
8. Strengths: Quality trained instructors, some new updated equipment.
   Weaknesses: Need to update more equipment (spray booth, hoists) and other little things that make the program really shine.
9. A big plus would be to get a student into a shop for a 2-3 day period to let them realize real world.
10. Major strengths: State of the art equipment and training - shack measuring, down draft spray booths, prep station, computer point mixing. frame straightening equipment. I - CAR training. Major weaknesses: Very difficult to duplicate REAL WORLD work environment.
11. Students are able to continue management program at FSU I believe it would be more beneficial to the students that want to become painters, to spend more time on smaller repairs, to become more proficient in tinting and blending. Complete overall paint jobs are less than 5% of our work.
12. Strengths: Provides positive continuing education opportunity for those seeking personal and professional growth during the college experience and provides sufficient practical skills for entry-level positions. The experience of time to mature allows techs to develop the needed ability to problem solve, no amount of classroom or lab time can provide this. Weakness: Need to put extra-emphasis on production-time it money!

September 2, 1999

Dear Automotive Body Advisory Committee Member:

All programs at Ferris State University are reviewed every five years. We are in the process of that review at this time for the Automotive Body program. Your responses and comments are important for the continued success and enhancement of this program. Please complete and return this survey. Your continued support of the Automotive Body program at Ferris State University is very much appreciated. If you have any questions please call Greg Key, Program coordinator, Automotive Center at (616) 592-5981. Each question has five boxes next to it numbered one through five, one is if you strongly agree, three is neutral and five is strongly disagree.

	1	2	3	4	5
1. The Advisory Committee meets often enough.	☐	☐	☐	☐	☐

Comments: _____

_____

2. The Automotive Body Program provides students with practical job application experience.	☐	☐	☐	☐	☐

Comments: _____

_____

3. The employment prospects for Automotive Body graduates are favorable upon completion of the program.	☐	☐	☐	☐	☐

Comments: _____

_____

4. The Advisory Committee members are knowledgeable about the Automotive Body program.	☐	☐	☐	☐	☐

Comments: _____

_____

	1	2	3	4	5
5. The instructional equipment used is current and representative of what graduates will use on the job.	☐	☐	☐	☐	☐

Comments: _____

6. Classes are reviewed and revised to keep current with changing job practices and technology.	☐	☐	☐	☐	☐

Comments: _____

7. The Advisory Committee is adequately utilized by the program.	☐	☐	☐	☐	☐

Comments: _____

8. Suggestions from the Advisory Committee are encouraged and adopted by the program.	☐	☐	☐	☐	☐

Comments: _____

9. Long term employment prospects remain extensive.	☐	☐	☐	☐	☐

Comments: _____

10. From your perspective, what are the major strengths and weaknesses of the Automotive Body Program at Ferris State University.

SECTION SEVEN

AUTOMOTIVE BODY PROGRAM

LABOR MARKET ANALYSIS

LABOR MARKET ANALYSIS

There are approximately 9,525 Auto Body Repairers and Automobile Painters employed in Michigan. More than a third worked in auto repair shops. Most Auto Body Repairers worked in or near metropolitan areas and large cities. Others worked in auto manufacturing, dealerships and government.

Employment according to the MOIS system only deals with expected increases for job opportunities in Michigan. However, the industry is all ready at a critical shortage of Auto Body Repair Technicians. Ask any owner of a repair facility how many technicians they need. Or the three-month wait to have your vehicle repaired in Grand Rapids.

Employment of Auto Body Repairers in Michigan is expected to increase about as fast as the average for all occupations through the year 2005, while the employment of Automotive Painters is expected to decline. An average of 380 annual openings is expected, with 130 due to growth and 250 due to replacement of those who retire, die, or leave the labor force for other reasons. Additional openings will occur as workers transfer to other jobs or occupations.

As the driving age population increases and the number of 2 car families increases, the number of vehicles on the road and consequently the number of accidents, will increase. Because new cars are also costly, people are keeping cars longer and having them repaired. These trends will spur the demand for Auto Body Repairers.

Most people who become Auto Body Repairers can expect steady work since the auto repair business is not usually affected by changes in the economy.

Earning depends on the size, type, and location of the employer and on the individual skill of the worker Auto Body helpers and trainees generally receive a straight hourly wage. Experienced Auto Body Repairers may be paid an hourly wage, commissions on the work they do, or a combination of both.

Nationally, the median weekly wage earned by Auto Body Repairers in 1997 was $500, which is about $12.50 per hour, based on a 40-hour workweek.

In the East North Central region, which includes Michigan, dealerships paid the average Auto Body Shop-Technician and Painter $36,661 per year or $17.63 per hour in late 1997. Highly experienced technicians could earn more. Nonunion Repairers usually earned less per hour.

The hourly wage in 1998 of Auto Body Repairers employed by the State of Michigan range from $12.56 to $18.92.

The starting pay of Ferris State University graduates from the Auto Body Program is $25,165 taken from the alumni survey in section #2. The starting pay for the Ferris State University graduates is not only higher then the starting pay for the nation and state it is equivalent to the median salary of all auto body technicians ($12/hr). Our graduate's present salary averages are $54,803 year. This annual salary of the Ferris State University Auto Body Program is $18,142 higher than the state average of $36,661. This shows the money making ability of a person with a degree from Ferris. This shows that the Auto Body Program not only trains higher skilled technicians but also educates its students.

Add this occupation to your Career Preference List

Auto Body Repairers fix damaged bodies and body parts of automotive vehicles such as cars, vans, trucks, buses, campers, and trailers.

NATURE OF THE OCCUPATION

Auto Body Repairers may:

Estimate the cost of a repair job

Pound out small dents with a hammer, pick hammer, or punch

Straighten bent or twisted frames

Weld metal parts

Remove parts to gain access to vehicle body and fenders

Remove, repair, or replace fenders, doors, or other body parts

Fill damaged areas with solder or plastic body fillers

File, grind, sand, and smooth filled or repaired surfaces

Refinish with a primer coat, sand and paint with a finish coat

Aim headlights and align wheels

Tools, equipment, and materials used may include:

* Wrenches & hammers	* Cutting torches
* Blueprints	* Hydraulic jacks
* Pulling devices	* Punches
* Pick hammers	* Compressors
* Dolly blocks	* Pneumatic tools
* Grinders and buffers	* Welding equipment
* Plastic filler	* Paint spray guns
* Masks and safety glasses	

OCCUPATIONAL SPECIALTIES

Body Repairers may specialize in these areas:

807.381-010 AUTOMOBILE BODY REPAIRERS fix damaged fenders and bodies on cars, trucks, buses, campers, and trailers.

807.381-030 FIBERGLASS AUTO-BODY REPAIRERS have expertise in making a wide variety of repairs on vehicle bodies made of certain materials, as in this case, fiberglass.

845.381-014 AUTOMOTIVE PAINTERS repaint auto surfaces with a color matched paint after the damaged area has been repaired. They remove paint, treat surfaces, mask and cover areas, position stencils for designs or lettering, mix paints, and use spray guns.

In addition to learning about these specialties, you may also find it helpful to explore the following MOIScripts:

013 MANUFACTURING PAINTER	128 SHEET METAL WORKER
155 AUTO MECHANIC	245 AUTO PARTS SERVICE CLERK
247 AUTO SERVICE ADVISOR	301 TRUCK & BUS MECHANIC

WORKING CONDITIONS AND REQUIREMENTS

Auto Body Repairers usually work indoors in well ventilated but often dusty shops. Repairers are exposed to a great deal of noise from hammers and power tools. There is usually an odor from painting and fumes from soldering, painting, and welding.

Auto Body Repairers often work in cramped, physically uncomfortable positions in order to reach the damaged parts of vehicle bodies. They may receive cuts from broken glass and sharp metal edges, burns from torches and hot metal, and injuries from power tools. Auto body repair work also involves getting greasy and dirty.

In Michigan, the average workweek is 40-48 hours. Usually hours of work are from 8 A.M. to 5 P.M. with frequent overtime. This occupation is typically stable and days without available work are rare. However, hours may be cut back when business is slow.

Auto Body Repairers must purchase hand tools, but employers usually supply power tools. Hand tools can range from $200 to $2,500 for a complete set.

Some Auto Body Repairers belong to unions and pay monthly union dues. The International Association of Machinists and Aerospace Workers is a union that represents Auto Body Repairers in Michigan.

You Should Prefer:

- Fixing and repairing objects
- Being indoors all day

You Should Be Able To:

- See details in objects or drawings
- Recognize slight differences in shapes or shadings

Look at flat drawings & visualize how they would look as solid

objects

- Perform a variety of duties which may change often
- Rate information using standards that can be checked

  Work with a minimum amount of supervision
- Do math problems well enough to figure cost-time estimates
- Work within precise limits or standards of accuracy

Math Problem You Should Be Able to Solve:

What gauge wire should be used in an extension cable 50 ft long, when the current is 5 amperes?

Reading Example You Should Be Able to Read and Comprehend:

To prevent internal stresses in metal frame straightening, heat should be limited to parts that are not severely bent. If heat is needed to straighten a frame member, the temperature should be kept below 1200øF. Excessive heat may weaken the metal and cause permanent damage. This is particularly true in the case of heat treated members.

Writing Example You Should Be Able to Produce:

Prepare a written estimate for a body repair job at the request of a potential customer.

Thinking Skill You Should Be Able to Demonstrate:

Should be able to demonstrate analytical skills and be detail oriented in assessing and repairing automobile bodies.

EDUCATION AND PREPARATION OPPORTUNITIES

NOTE: On-The-Job Training provided by the employer; a High School Diploma with specific Vocational Education Classes or a Certificate (program of up to one year of study beyond high school); an Associate Degree (two years of study beyond high school) or an Apprenticeship (usually three to four years of training beyond high school) may qualify a person for this occupation.

The following education and preparation opportunities are helpful in preparing for occupations in the MOIScript:

****SCHOOL SUBJECTS****

038 GENERAL MATH	076 AUTO BODY REPAIR
077 AUTO MECHANICS	078 BLUEPRINT READING
080 CO-OP EDUC. TRADE & INDUSTRY	083 DRAFTING
089 MACHINE SHOP	090 MECHANICAL DRAWING
091 METAL SHOP	097 WELDING

****VOCATIONAL EDUCATION PROGRAMS****

042 AUTOMOTIVE BODY REPAIR

Approved vocational education programs in Automotive Body Repair prepare students to repair or replace fenders and other body parts of automobiles. Instruction includes body preparation for painting and finishing.

Courses in other trade and industrial programs may be required for completion of this program.

058 TRANSPORTATION SERVICES & TECHNOLOGY

Approved vocational education programs in Transportation Services & Technology provide instruction in both foundation skills and occupationally specific skills. Upon completion of a core curriculum, students select one of 5 job titles to study: Automotive technician trainee, auto body technician trainee, diesel technician trainee, small engine technician trainee, or aircraft technician trainee.

Courses in other trade & industrial programs may be required for completion of this program.

High school students should consult their guidance office for more information about the specific requirements of this program at their school or area vocational education center.

Students should obtain the local Career Preparation Consumer Report for information on what happens to students who successfully complete a program. This information is available at each high school or career/technical center.

The table below provides **State of Michigan** data based on the 1995 Follow-Up Survey completed 10 months after graduation.

Statewide data for all programs follows: The program related job placement rate is 36% with an average hourly wage of $6.34. The continuing education rate is 56%.

Program Name	# of Completers	Related Placement	Hourly Wage	Continuing Education
Auto Body Repair	589	53.6%	$7.97	30.0%

****POSTSECONDARY PROGRAMS****

141 AUTO BODY REPAIR

Programs in Auto Body Repair provide opportunities to gain the knowledge and skills necessary for employment repairing damaged bodies and body parts of automotive vehicles such as cars, trucks, buses, and trailers. Similar opportunities are identified in the MOIS Automotive Technology Postsecondary Program #16.

Courses vary from school to school but may include:

General Math	Metallurgy
Major Collision Repair	Auto Body Frame Repair
Paints & Painting Technology	Metal Finishing
Welding	

****APPRENTICESHIP OPPORTUNITIES****

004 AUTO BODY REPAIRER

Some people enter occupations within this MOIScript through an apprenticeship program. An apprenticeship program is a formal program that takes 3 - 5 years to complete with most of the time spent on the job.

WHAT IS LEARNED ON THE JOB

Estimate Costs of Repairs	Repair Small Dents
Replace Sheet Metal	Weld
Mix Paint	Repair Equipment
Mask & Paint a Car	Apply Body Putty
Finish & Polish a Car	Work with Fiberglass
Rebuild Auto Bodies	

WHAT IS LEARNED IN THE CLASSROOM

Welding & Brazing	Soldering & Leading
Cleaning Equipment	Masking & Painting
Finishing & Polishing	Estimating Repair Costs
Body Alignment	Rubbing Down Coats
Rough Sanding & Preparing	Removing & Replacing Sheet
Surfaces	Metal
' 'ching Colors	Removing & Installing New
Safety Practices	Panels & Parts

****MILITARY TRAINING PROGRAMS****

Please check the Military website athttp://www.myfuture.com

AUTOMOTIVE AND HEAVY EQUIPMENT MECHANICS

Keeping automotive and heavy equipment in good working condition is vital to the success of military missions. Automotive and heavy equipment mechanics maintain and repair vehicles such as jeeps, cars, trucks, tanks, self-propelled missile launchers, and other combat vehicles. They also repair bulldozers, power shovels, and other construction equipment.

What They Do

Automotive and heavy equipment mechanics in the military perform some or all of the following duties:

- Troubleshoot problems in vehicle engines, electrical systems, steering, brakes, and suspensions
- Tune and repair engines

  Replace or repair damaged body parts, hydraulic arms or shovels, and grader blades
- Establish and follow schedules for maintaining vehicles

Training Provided

Job training consists of 8 to 29 weeks of classroom instruction. Training length varies depending on specialty. Course content typically includes:

Engine repair and tune-up

- Troubleshooting mechanical and electrical problems
- Repairing and replacing body panels, fenders, and radiators

Further training occurs on the job and through advanced courses. The Army, Navy, and Marine Corps offer certified apprenticeship programs for some specialties in this occupation.

Special Requirements

Although some women are automotive and heavy equipment mechanics, some specialties in this occupation are open only to men.

Work Environment

Automotive and heavy equipment mechanics usually work inside large repair garages. They work outdoors when making emergency repairs in the field.

Physical Demands

Automotive and heavy equipment mechanics may have to lift heavy parts and tools. They sometimes have to work in cramped positions. Normal color vision is required for some specialties to work with color-coded wiring and to read diagrams.

Helpful Attributes

Helpful school subjects include auto mechanics and industrial arts. Helpful attributes include:

- Preference for physical work
- Interest in troubleshooting and repairing mechanical problems
- Interest in automotive engines and how they work

Civilian Counterparts

Civilian automotive and heavy equipment mechanics may work for service stations, auto and construction equipment dealers, farm equipment companies, and state highway agencies. They perform duties similar to military automotive and heavy equipment mechanics. They may also be called garage mechanics, carburetor mechanics, transmission mechanics, radiator mechanics, construction equipment mechanics, or endless track vehicle mechanics.

Opportunities

The services have about 54,775 automotive and heavy equipment mechanics. On average, they need about 6,450 new mechanics each year. After job training, mechanics begin repairing equipment under the direction of a supervisor. In time, they have the opportunity to supervise other workers and possibly

manage repair shops, motor pools, or maintenance units.

OPPORTUNITIES FOR EXPERIENCE AND METHODS OF ENTRY

Part-time jobs may be available as an assistant or helper in auto body repair shops. Secondary vocational education programs and postsecondary programs in auto body repair may offer co-op, internship, or other related work experience opportunities. Related experience can also be obtained in the military services or through a formal apprenticeship program.

School-to-Work opportunities include:

informal apprenticeships

mentorships

job shadowing experiences

touring a local Auto Body Repairer employer

internships

volunteer work with a Auto Body Repairers employer

community service work with an agency

Many Auto Body Repairers enter this occupation through apprenticeship programs. Others receive three or four years of on-the-job training as helpers. Application may be made directly to auto body repair shops. Newspaper want ads and school placement offices also may be helpful.

EARNINGS AND ADVANCEMENT

Earnings depend on the size, type, and location of the employer and on the individual skill of the worke Auto body helpers and trainees generally receive a straight hourly wage. Experienced Auto Body Repairers may be paid an hourly wage, commissions on the work they do, or a combination of both.

Nationally, the median weekly wage earned by Auto Body Repairers in 1997 was $500, which is about $12.50 per hour, based on a 40-hour work week.

In the East North Central region, which includes Michigan, dealerships paid the average Auto Body Shop-Technician and Painter $36,661 per year or $17.63 per hour in late 1997. Highly experienced technicians could earn more. Nonunion Repairers usually earned less per hour.

Most Auto Body Repairers working for auto manufacturing companies had an hourly wage (1998) ranging from $19.55 to $22.79. These Auto Body Repairers and painters earned an additional amount per hour for a cost-of-living allowance.

The hourly wage in 1998 of Auto Body Repairers employed by the State of Michigan ranged from $12.56 to $18.92.

The 1996 graduates of high school vocational education programs who are working in jobs related to Auto Body Repair earned a beginning average of $7.97 per hour in 1997.

Fringe benefits vary with the employer. In small auto repair and collision shops, benefits may not be available. Individuals working in larger repair shops, fleet garages, and auto dealerships may receive life, accident, disability, dental, and hospitalization insurance; paid vacations and holidays; paid sick leave; pension plans; and uniforms.

In larger shops, Auto Body Repairers may be promoted to estimator or body shop supervisor. In a smal shop, there is usually little chance for promotion or advancement. Some own their own shops.

EMPLOYMENT AND OUTLOOK

There were approximately 239,100 Auto Body Repairers and Automotive Painters employed nationally in 1996. Employment of Auto Body Repairers and Painters is expected to grow about as fast as the average for all occupations through the year 2006. The industry distribution for Auto Body Repairers and Automotive Painters looked like this:

SIC Code	Industry	% Employed
80750	Auto Repair, Services, and Parking	63.2
62551	Motor Vehicle Dealers	26.9
61501	Motor Vehicles, Parts, and Supplies	2.3
51421	Local and Long Distance Trucking and Terminals	1.8
41371	Motor Vehicles and Equipment	1.6
90000	Government	1.3
- -	Other	2.9

Employment is expected to grow as a result of the rising number of motor vehicles damaged in traffic. Accidents are expected to increase as the number of motor vehicles grows, even though improved highways, driver training courses, and safety features on new vehicles may slow the rate of increase.

There are approximately 9,525 Auto Body Repairers and Automobile Painters employed in Michigan. More than a third worked in auto repair shops. Most Auto Body Repairers worked in or near metropolitan areas and large cities. Others worked in auto manufacturing, dealerships and government

According to the 1990 Census, 4.0% of this occupation were female, 9.5% were Black and 2.5% were persons of Hispanic origin.

Employment of Auto Body Repairers in Michigan is expected to increase about as fast as the average for all occupations through the year 2005, while the employment of Automotive Painters is expected to decline. An average of 380 annual openings is expected, with 130 due to growth and 250 due to replacement of those who retire, die, or leave the labor force for other reasons. Additional openings wil occur as workers transfer to other jobs or occupations.

As the driving age population increases and the number of 2 car families increases, the number of vehicles on the road and consequently the number of accidents, will increase. Because new cars are also costly, people are keeping cars longer and having them repaired. These trends will spur the demand for Auto Body Repairers.

Most people who become Auto Body Repairers can expect steady work since the auto repair business is not usually affected by changes in the economy.

The recent surge in new car sales in Michigan may account for the recent slower growth rate in this

occupation.

MICHIGAN'S EMPLOYMENT OUTLOOK TO 2005

EMPLOYMENT AND OUTLOOK REGIONS	NUMBER EMPLOYED	PERCENT GROWTH	PROJECTED YEARLY JOB OPENINGS
State Total	9,525	14.6%	380

SOURCES OF ADDITIONAL INFORMATION

Printed Occupational information is available upon written request from the sources below.

U.S. Department of Labor Bureau of Apprenticeship and Training State Director's Office 801 South Waverly, Suite 304 Lansing, MI 48917 1-517-377-1746 http://www.wdsc.org	Michigan Automobile Dealers Association 1500 Kendale Boulevard P.O. Box 2525 East Lansing, MI 48826 1-517-351-7800
American Automobile Manufacturers Association Educational Programs New Center Building, Ste.300 7430 Second Avenue Detroit, MI 48202 13-872-4311 http://www.aama.org	Automotive Service Industry Association 25 Northwest Point Elk Grove Village, IL 60007 1-708-228-1310 http://www.aftmkt.com/asia
Automotive Service Association P.O. Box 929 Bedford, TX 76095-0929 1-817-283-6205 http://www.asashop.org	Detroit Auto Dealers Association 1800 W. Big Beaver Rd. Troy, MI 48084 1-810-643-0250 http://www.dadanet.com
Michigan Employment Security Agency (http://web.mesc.state.mi.us/ employment_service_agency/ index_ESA.html)	Telephone Directory Yellow Pages Under Automobile Body Repairing and Painting
Michigan Virtual Automotive College http://www.mvac.org	Local Military Recruiters
School and College Placement Offices	

SUMMARY PROFILE

T occupation of Auto Body Repairer can be summarized by the following:

Growth Outlook:	Slower than average

Salary Potential:	Below average potential growth
GOE Cluster:	Mechanical Interest Group (#05)
Work Values:	Work with hands, work with machines or equipment, auto mechanics
SDS Code:	Realistic (repairs damaged vehicles)
.ationship to Data:	Compiling (keeps customer records)
Relationship to People:	Instructional (repairs damaged vehicles according to customer request)
Relationship to Things:	Precision-Working (uses mechanical tools to repair damaged vehicles)

Here Are Your Search Results!

Schools offering programs for Moiscript #154 Auto Body Repairer

Type: Public Universities (4 Year)

Region: Michigan's Upper Pennisula

Northern Michigan University

Region: Northwest Michigan

Ferris State University

Return to the MOIS HomePage

Call Roy Dickson

Here Are Your Search Results!

Schools offering programs for Moiscript #154 Auto Body Repairer

Type: Public Community Colleges (2 Year)

Region: Michigan's Upper Pennisula

Bay de Noc Community College

Region: Northwest Michigan

Kirtland Community College
Mid Michigan Community College

Region: Northeast Michigan

Alpena Community College

Region: Southeast Michigan

Lansing Community College
Mott Community College
Oakland Community College
Washtenaw Community College
Wayne County Community College

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Here Are Your Search Results!

Schools offering programs for Moiscript #154 Auto Body Repairer

Type: Private Independent Colleges (2 & 4 Year)

Region: Southwest Michigan

Andrews University

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MOIS Top 20 Internet Accessed Careers

August, 1996 through April, 1999

	Moiscript Number and Name	Accessed
1.	183 SPORTS PROFESSIONAL	4121
2.	355 F.B.I. AGENT	3844
3.	231 MORTICIAN	3310
4.	317 VETERINARY ASSISTANT	3017
5.	325 ACTOR/ACTRESS	3015
6.	098 ELEMENTARY SCHOOL TEACHER	2729
7.	177 PHYSICAL THERAPIST	2721
8.	318 PROBATION & PAROLE OFFICER	2693
9.	186 PSYCHOLOGIST	2480
10.	190 INTERIOR DESIGNER	2399
11.	155 AUTO MECHANIC	2393
12.	414 PHYSICAL THERAPIST ASSISTANT & AIDE	2295
13.	195 PHOTOGRAPHER	2244
14.	371 PRIVATE INVESTIGATOR	2212
15.	182 VETERINARIAN	2199
16.	312 PHYSICIAN'S ASSISTANT	2164
17.	029 ACCOUNTANT & AUDITOR	2135
18.	051 LAWYER	2129
19.	229 ANIMAL CARETAKER	2070
20.	342 ADVERTISING COPYWRITER	2024

Other Statistics: Graphical or All Careers

Return to the MOIS HomePage This page has been viewed 5084 times since November 4, 1998!

Michigan Occupational Information System
Miniscript #154 - Auto Body Repairer

Auto Body Repairers fix damaged bodies and body parts of automotive vehicles such as cars, vans, trucks, buses, campers, and trailers.

General Job Tasks

- Estimate the cost of a repair job
- Pound out small dents with a hammer, pick hammer, or punch
- Straighten bent or twisted frames
- Weld metal parts
- Remove parts to gain access to vehicle body and fenders
- Remove, repair, or replace fenders, doors, or other body parts
- Fill damaged areas with solder or plastic body fillers
- File, grind, sand, and smooth filled or repaired surfaces
- Refinish with a primer coat, sanding and painting with a finish coat
- Aim headlights and align wheels

Work Environment

- Auto Body Repairers usually work indoors in well ventilated but often dusty shops. There is usually an odor from painting and fumes from soldering, painting, and welding.
- Auto Body Repairers often work in cramped, physically uncomfortable positions in order to reach the damaged parts of vehicle bodies. They may receive cuts from broken glass and sharp metal edges, burns from torches and hot metal, and injuries from power tools.
- In Michigan, the average workweek is 40-48 hours. This occupation is typically stable and days without available work are rare.

| Search for Michigan schools which offer programs supporting this occupation |

On the Internet, only the *General Job Tasks* and *Work Environment* sections of the Miniscript are posted at the presen time. Sections not posted are *Skills/ Personal Characteristics/ Education, Earnings, Outlook, School-to-Work Opportunities,* and *Next Steps*.

The Miniscripts are an abridged, 2-page version of the full text about a career called a MOIScript. A MOIScript contains about eight to ten pages of detailed career and related information. You may call the MOIS Office at 517-244-1338 to obtain an order form and license agreement for any of the MOIS products.

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SECTION 8

AUTOMOTIVE BODY PROGRAM

EVALUATION OF FACILITIES AND EQUIPMENT

Facilities

The Automotive Body Technology program started in 1955 in a wing of the Trade and Industrial Center on the Ferris State University campus. When the program began, it occupied approximately 10,600 sq. ft. There was one faculty member and 20 students. The Automotive Body Technology is the second oldest program in the departments.

Presently the Automotive Body Technology program occupies approximately 13,300 sq. ft. in the Automotive Center building. This facility had a major remodel in 1988 to better accommodate the automotive programs.

One of the major features of the Automotive Body Technology program at Ferris State University is the large service lab operations. This 13,300 sq. ft. service shop is designed to operate much like a body dealership. The vehicles that are worked on in this shop are mainly provided by service customers and the work is done by automotive students and supervised by the faculty.

Technological Equipment/Computers

The program's equipment has been upgraded over the past ten year's which includes various new pieces of technology. The major expenditures for the technology are as followed. They are two new down draft paint spray booths, computerized paint mixing, computerized frame measuring, computerized estimating, air handling system, and a new prep station. Various other smaller pieces of equipment such as mig welders, and hand tools have been purchased through the years. All of these major expenditures has afforded the Auto Body Program to be one of the best equipped programs at Ferris. Listed below are the major pieces of technology and how they were funded. The only way this program became so well equipped as you can see is by many different resources both from industry and Ferris.

The technological/computer equipment used in the Auto Body Program is useful to its graduates' careers.

A partial list of tools and manual systems along with our vehicle list shows the corporate commitment to the program through equipment donations.

Presently 32 of our 60 vehicles are only one year old the rest are only a couple years old. The list of vehicles illustrates how we rate them for educational use each as air, cruise, engine, transmission, etc. We replace the oldest first unless the vehicle has some special system on it that we have very few of. That vehicle may be a year of two older because it might be harder to replace that particular type of vehicle.

We have four state of the art computer manuals; one each from GM, Ford, and Chrysler, and an All Data system for all other car lines. A long with the computer systems we have a paper manual system and Mitchell system as well.

Our computers are up dated every two weeks with CD ROMs that are sent to us from the corporations. In-between the two weeks we can call over the phone lines using our corporate computers to connect with a dialer main frame for information.

Major Technology	Cost	Year	School/Company
2 paint spray booths	$200,000	87/88	Building remodel Ferris
Air handling system	$ 51,000	97	Finish Master/Minor CAPS
Computerized frame measuring	$ 30,000	97	Greg Key/State grrant
Frame machine fixtures	$ 90,000	97	ALTRA Products
Computerized paint mixing	$ 8,000	98	PPG Industries
Prep Station	$ 25,000	99	Finish Master/BPH/Voc Ed Funds
Computerized estimating	$ 3,877	99	S&E Budget
Chainless anchors for frame machine	$ 6,050	99	Voc Ed Dollars

The budgets for the Auto Body Program seem to meet their present needs. Both the S&E and Voc. Ed. Budgets have had slight increases in the past few years. There were a few years that the Auto Body Program didn't receive any Voc. Ed. monies. Sense the Voc Ed. Funds can now be dispensed with more input from the University and if the auto body program keeps getting its share there would be no need for additional monies.

FSU Automotive Department
Demo Car List Revised 3-17-99

#; Yr.; Mfgr.; Model	Engine	Trans	ABS	Elec. Dash	Cruise	Auto A/C	SRS
#1 1995 Chevy Corvette (red)	5.7L	6 spd.	N	YES	yes	yes	yes
#2 1996 Lincoln Towncar (pearl)	4.6L	AXOD	Yes	No	Yes	ACC	Yes
#3 1995 Neon Plymouth (white)	2.0L	5spd	No	No	No	Air	Yes
#4 1995 Dodge 2500 P/U	V-10	4spd	Yes	No	Yes	Yes	Yes
#5 1992 Ford Ranger 4X4 (red/silver)	4.0L	AXOD		No		Air	No
#5-A 1997 Chevy Venture ver)	3400 SFI	AUTO	Yes	No	Yes	Yes	Yes
#6 1999Buick Regal	3800	ATOD	Yes	Yes	Yes	Air	yes
#7 Chevy truck (green)	5.7L	AOD	Yes	No	Yes	Air	Yes
#8 1998 Dodge Intrepid (white)	3.2L	5spd	Yes	No	Yes	Yes	Yes
#9 1995 Caravan (blue)	3.3L	4spd	Yes	No	Yes	Air	Yes
#10 1997 JEEP Wrangler	2.5l	5spd	No	No	No	No	Yes
#11 1997 Chrysler Stratus LX	2.0L	5spd	Yes	No	Yes	A/C	Yes
#12 1995 Dodge Stratus	2.5L	Auto	Yes	No	Yes	No	Dual
#13 1993 Camaro Z-28	5.7L	Man6	Yes	No	Yes	No	Yes
#14 1998 Chevy pick-up green	5.7L	auto	Yes	No	Yes	No	Yes
#15 1998 Chevy excab pick-up lue 4x4	5.7L	4spd A/T	Yes	No	Yes	No	Dual
#16 1995 Pontiac Bonneville (green)	3.8L	4spd A/T	Yes	No	Yes	Yes	Yes
#17 1995 Chevy Blazer (blue)	4.3L	4spd A/T	Yes	No	Yes	Yes	Yes
#18 1998 GMC Savana van white	5.7L	Auto O/D	No	No	No	Yes	Yes
#19 1993 Lincoln Mark VIII (white)	4.6L	AODEN	Yes	No	Yes	Yes	Yes
#20 1998 Chevy Malibu	2.4L	Auto	Yes	No	Yes	Yes	Yes
#21 1995 Ford Windstar (lt. blue)	3.8L	ATOD	No	No	Yes	Air	Yes
#22 1991 Tempo White	2.3L	Auto	No	No	No	Yes	No

1997 Cadillac Deville (light tan)	4.6L NStar		Yes				Yes
#24 1996 Ford E150 Van (Red)	S T O	R A	G E		VEHI-	CLE	
#25 1999 Pontiac Grand Am	3.4L	4spd	Yes	No	Yes	A/C	Dual
#26 1996 Chevy Suburban (white)	5.7L	Auto	Yes	No	yes	Yes	Yes
#27 1994 Saturn (maroon)	1.9 OHC		Yes	No	Yes	X	Yes
#28 1996 Dodge 3500 Maxi Van er/White							
#29 1997 Jeep (green)	4.0L	AUTO	Yes	Yes	NO	YES	YES
#30 1996 Chrysler Mini Van (teal)							
#31 1998 Olds Intrigue	3800 II	Auto	Yes	No	Yes	Yes	Yes
#32 1998 Buick Rivera Green	3.8 S/C	4sp auto	Yes	No	Yes	Yes	yes
#33 1996 Ranger 4X2 (green)	4.0L		No	No	Yes	No	No
#34 1999 Savanna Van	5.7	Auto	Yes	No	Yes	Air	Yes
#35 1996 Dodge Intrepid (Platinum)	3.5L	5spd	No	No	Yes	Yes	Yes
#36 1996 Ford E250 Diesel Van Blue	7.3 DIT	Auto	Rear ABS	No	No	No	Yes
#37 1996 Ford Taurus GL (red)							
#381999 Cadillac DeVille (Teal)	4.6L	5spd	Yes	No	Yes	Yes	Yes
#39 1989 Ford Thunderbird (white) er coupe	3.8L	AOD	Yes	No	Yes	Air	No
#401997 Buick Regal GS (Burgandy)	3800	5spd	Yes	No	Yes	Yes	Yes
#41 1995 Mercury Villager (grey)	3.0L	ATOD	Yes	No	Yes	Air	Yes
#42 1996 Ford Thunderbird	4.6l	Auto	Yes	Yes	Yes	Yes	Yes
#43 1996 Ford Crown Victoria rgandy)							
#44 1996 Ford Explorer (green)	4.0L	Auto	Yes	No	Yes	Air	Yes
#45 1997 Ford F150 4x4 Grey	4.6L	5spd Man	Yes	No	Yes	Air	Yes
#46							
#47 1995 Lincoln Continental en)	4.6L	ATOD	Yes	Yes	Yes	Air	Yes
#48 1995 Mercury Mystique (white)	2.0L	AUTO	Yes	No	Yes	Air	Yes
#49 1994 Mercury Cougar (aqua)	3.8L	4-auto	Yes	No	Yes	No	Yes
) 1998 GMC Truck (green)	5.7	4-auto	Yes	No	Yes	Air	No

1995 Ford Taurus (red)	3.0L		No	No	Yes	No	Yes
#52 1995 Chrysler MiniVan (silver)							
#53 1998 Durango	5.2L	Auto	Yes	No	Yes	A/C	Yes
#54 1996 Ford Mustang (Grey)	3.8L	Auto	Yes	No	Yes	Air	Yes
#55 1996 Nissan Quest Blue	3.0L	4spd AOD	Yes	NO	Yes	Air	Yes
#56 1998 Blazer gray	4.3L	4spd auto	Yes	No	Yes	Yes	Yes
#57 1995 Buick LeSabre ampaign)	3.8l	4spd auto	Yes	No	Yes	Yes	Yes
#58 1995 Ford Probe (White)		5-spd	No	No	Yes	Air	Yes
#59 1999 Olds Alero gold	3400	4spd auto	Yes	No	Yes	Yes	Yes
#60 1996 Nissan D-21 Pick-up Red	2.4L	3spd OD	No	No	Yes	Air	Yes
#87 1994 Astro Van (blue)	4.3L	4-spd. Auto	Yes	No	Yes	No	Yes

I-CAR EDUCATION FOUNDATION
3701 ALGONQUIN RD STE 400
ROLLING MEADOWS IL 60008

PAGE NO. 1 | INVOICE NO. 02414 | APPLY TO | INVOICE DATE 03/05/97 | CUST NO. FEBI1

02488 0

INVOICE

WORK ORDER NO. B.O.

SOLD TO

FERRIS STATE UNIVERSITY
708 CAMPUS DR
BIG RAPIDS, MI 49307

SHIP TO

FERRIS STATE UNIVERSITY
708 CAMPUS DR
BIG RAPIDS, MI 49307

DATE SHIPPED	PURCHASE ORDER NO.	SHIP VIA	F.O.B.	TERMS

BUYER	DATE REQUESTED	LOCATION	SALESPERSON	TERRITORY
03/05/97		UPS GROUND	CUSTOMER PAY	IN ADVANCE

ITEM NO.	DESCRIPTION	QUANTITY ORDERED	QUANTITY BACK ORD.	QUANTITY SHIPPED	UNIT PRICE	EXTENSION	TAX
	03/12/97 00001 BRIAN NEILSON					I-CAR MANUAL	
AT-NSTR-1A-I-K	ADV TECH 1A INSTRUCTOR KIT (PREP)	1		1	38.79	38.79	
AT-NSTR-1B-I-K	ADV TECH (1B) INSTR KIT (PANEL REPL)	1		1	38.79	38.79	
AT-NSTR-1C-I-K	ADV TECH (1C) INSTR KIT (TRIM/HRDWR)	1		1	38.79	38.79	
AT-NSTR-1D-I-K	ADV TECH (1D) INSTR KIT(METAL STRAIGHT.)	1		1	38.79	38.79	
AT-NSTR-1E-I-K	ADV TECH (1E) INSTR KIT (BODY FILLERS)	1		1	38.79	38.79	
AT-NSTR-1F-I-K	ADV TECH (1F) INSTR KIT (DOOR SKIN)	1		1	38.79	38.79	
AT-NSTR-1G-I-K	ADV TECH (1G) INSTR KIT (QTR PANEL)	1		1	38.79	38.79	
AT-NSTR-1H-I-K	ADV TECH (1H) INSTR KIT (GLASS/HRDWR)	1		1	38.79	38.79	
AT-STRU-2A-I-K	ADV TECH 2A INSTRUCTOR KIT (DAMAGE)	1		1	38.79	38.79	
AT-STRU-2B-I-K	ADV TECH 2B INSTR KIT (STRAIGHTENING)	1		1	38.79	38.79	
AT-STRU-2C-I-K	ADV TECH 2C INSTR KIT (PANEL REPLCMT)	1		1	38.79	38.79	
AT-STRU-2D-I-K	ADV TECH 2D INSTR KIT (GLASS REPLCMT)	1		1	38.79	38.79	
AT-STRU-2E-I-K	ADV TECH 2E INSTR KIT (CORROSION)	1		1	38.79	38.79	
AT-WELD-3A-I-K	ADV TECH 3A INSTRUCTOR KIT (MIG WELD)	1		1	38.79	38.79	
AT-WELD-3B-I-K	ADV TECH 3B INSTRUCTOR KIT (CUT/HEAT)	1		1	38.79	38.79	
AT-WELD-3C-I-K	ADV TECH 3C INSTRUCTOR KIT (ADV METHODS)	1		1	38.79	38.79	

SUBTOTAL

CONTINUED

INVOICE NO.

PLEASE REMIT THIS AMOUNT

I-CAR EDUCATION FOUNDATION
3701 ALGONQUIN RD STE 400
ROLLING MEADOWS IL 60008

PAGE NO.	INVOICE NO.	APPLY TO	INVOICE DATE	CUST. NO.
2	02414		03/05/97	FEB11
			02488	0

INVOICE

WORK ORDER NO. B.O.

SOLD TO
FERRIS STATE UNIVERSITY
708 CAMPUS DR
BIG RAPIDS, MI 49307

SHIP TO
FERRIS STATE UNIVERSITY
708 CAMPUS DR
BIG RAPIDS, MI 49307

DATE SHIPPED	PURCHASE ORDER NO.	SHIP VIA	F.O.B.	TERMS

BUYER	DATE REQUESTED	LOCATION	SALESPERSON	TERRITORY
03/05/97		UPS GROUND	CUSTOMER PAY	IN ADVANCE

ITEM NO.	DESCRIPTION	QUANTITY ORDERED	QUANTITY BACK ORD.	QUANTITY SHIPPED	UNIT PRICE	EXTENSION	TAX
	03/12/97 00001 BRIAN NEILSON					I-CAR MANUAL	
AT-REFI-4A-I-K	ADV TECH (4A) INSTR KIT (SAFETY)	1		1	38.79	38.79	
AT-REFI-4B-I-K	ADV TECH (4B) INSTR KIT (FINISHES)	1		1	38.79	38.79	
AT-REFI-4C-I-K	ADV TECH (4C) INSTR KIT (SURFACE PREP)	1		1	38.79	38.79	
-REFI-4D-I-K	ADV TECH (4D) INSTR KIT (EQPMT. PREP)	1		1	38.79	38.79	
AT-REFI-4E-I-K	ADV TECH (4E) INSTR KIT (TINTING)	1		1	38.79	38.79	
AT-REFI-4F-I-K	ADV TECH (4F) INSTR KIT (APPL.FINISH)	1		1	38.79	38.79	
AT-REFI-4G-I-K	ADV TECH (4G) INSTR KIT (BLENDING)	1		1	38.79	38.79	
AT-REFI-4H-I-K	ADV TECH (4H) INSTR KIT (APPL. PROBLEMS)	1		1	38.79	38.79	
AT-REFI-4I-I-K	ADV TECH (4I) INSTR KIT (FINISH DEFECTS)	1		1	38.79	38.79	
AT-REFI-4J-I-K	ADV TECH (4J) INSTR KIT (DETAILING)	1		1	38.79	38.79	
AT-ESTI-5A-I-K	ADV TECH 5A INSTR. KIT (DAMAGE)	1		1	38.79	38.79	
AT-ESTI-5B-I-K	ADV TECH 5B INSTR. KIT (MANL REPORT)	1		1	38.79	38.79	
AT-ESTI-5C-I-K	ADV TECH 5C INSTR. KIT (COMPUTR REPORT)	1		1	38.79	38.79	
AT-PLAS-6A-I-K	ADV TECH (6A) INSTR KIT (IDENTIFICATION)	1		1	38.79	38.79	
AT-PLAS-6B-I-K	ADV TECH (6B) INSTR KIT (ADHESIVE REPAIR	1		1	38.79	38.79	
AT-PLAS-6C-I-K	ADV TECH (6C) INSTR KIT (WELDING REPAIR)	1		1	38.79	38.79	

SUBTOTAL

CONTINUED

INVOICE NO.

PLEASE REMIT THIS AMOUNT

I-CAR EDUCATION FOUNDATION
3701 ALGONQUIN RD STE 400
ROLLING MEADOWS IL 60008

PAGE NO.	INVOICE NO.	APPLY TO	INVOICE DATE	CUST. NO.
3	02414		03/05/97	FEBI1
			02488	0

INVOICE

WORK ORDER NO. B.O.

SOLD TO
FERRIS STATE UNIVERSITY
708 CAMPUS DR
BIG RAPIDS, MI 49307

SHIP TO
FERRIS STATE UNIVERSITY
708 CAMPUS DR
BIG RAPIDS, MI 49307

DATE SHIPPED	PURCHASE ORDER NO.	SHIP VIA	F.O.B.	TERMS

BUYER	DATE REQUESTED	LOCATION	SALESPERSON	TERRITORY
03/05/97		UPS GROUND	CUSTOMER PAY	IN ADVANCE

ITEM NO.	DESCRIPTION	QUANTITY ORDERED	QUANTITY BACK ORD.	QUANTITY SHIPPED	UNIT PRICE	EXTENSION	TAX
	03/12/97 00001 BRIAN NEILSON					I-CAR MANUAL	
AT-PLAS-6D-I-K	ADV TECH (6D) INSTR KIT (DASH REPAIR)	1		1	38.79	38.79	
AT-PLAS-6E-I-K	ADV TECH (6E) INSTR KIT (SMC REPAIR)	1		1	38.79	38.79	
AT-PLAS-6F-I-K	ADV TECH (6F) INSTR KIT (PLAS. REFINISHG	1		1	38.79	38.79	
AT-MECH-7A-I-K	ADV TECH (7A) INSTR KIT (STEER/SUSP)	1		1	38.79	38.79	
AT-MECH-7B-I-K	ADV TECH (7B) INSTR KIT (ELEC. SYSTEMS)	1		1	38.79	38.79	
AT-MECH-7C-I-K	ADV TECH (7C) INSTR KIT (BRAKE SYSTEMS)	1		1	38.79	38.79	
AT-MECH-7D-I-K	ADV TECH (7D) INSTR KIT (A/C SYSTEMS)	1		1	38.79	38.79	
AT-MECH-7E-I-K	ADV TECH (7E) INSTR KIT (COOL. SYSTEMS)	1		1	38.79	38.79	
AT-MECH-7F-I-K	ADV TECH (7F) INSTR KIT (DRIVE TRAINS)	1		1	38.79	38.79	
AT-MECH-7G-I-K	ADV TECH (7G) INSTR KIT (FUEL/EXHAUST)	1		1	38.79	38.79	
AT-MECH-7H-I-K	ADV TECH (7H) INSTR KIT (RESTRAINT SYS) MECHANICAL/ELECTRICALL REPAIR	1		1	38.82	38.82	

SUBTOTAL	FREIGHT	
1668.00	228.00	1896.00

Thank You for Supporting the
I-CAR Education Foundation.

INVOICE NO. 02414

PLEASE REMIT THIS AMOUNT

Ferris State University

PURCHASE ORDER

TAX FREE REGISTRY NO. 38-73-0152F

DATE	PURCHASE ORDER
12/[illegible]/97	[illegible]

F ALL CHARGES, INCLUDING SHIPPING AND HANDLING, PRICES AND ANY ADDITIONAL CHARGES, AR[illegible] LISTED CORRECTLY; CALL THE "CONTACT" PERSON LISTED BELOW TO CORRECT THE OR[illegible] BEFORE SHIPMENT.

PURCHASE ORDER NUMBER SHOWN ABOVE MUST BE PLAINLY NOTED ON EACH INVOICE, O[illegible] PACKAGES AND SHIPPING TAGS, AND IN ALL CORRESPONDENCE PERTAINING TO THIS ORDE[illegible]

TERMS	F.O.B.	QUOTE NO. / QUOTE DATE	EXPECTED DELIVERY DATE
N 30	DEST. PREPAY & ADD		

CONTACT	PHONE	REQUEST NO.	DEPARTMENT / INTERNAL NO.	VENDOR I.D. NO.
[illegible] KUNNEN	616/592-2655	A8727	39150	V00061359[illegible]

SEE REVERSE SIDE FOR SPECIAL INSTRUCTIONS

BILL TO: FERRIS STATE UNIVERSITY
ACCOUNTS PAYABLE OFFICE
252 PRAKKEN BUILDING
420 OAK STREET
BIG RAPIDS, MI 49307-2020

VENDOR
[illegible]
[illegible] ALGONQUIN RD STE 400
ROLLING MEADOWS IL [illegible]

SHIP TO
FERRIS STATE UNIVERSITY
AUTOMOTIVE DEPARTMENT
IMC [illegible]
VIC FOWLER
708 CAMPUS DR
BIG RAPIDS MI 49307-2[illegible]

ACCOUNT NUMBER	PERCENT	AMOUNT	ACCOUNT NUMBER	PERCENT	AMOUNT
[illegible]-391[illegible]-[illegible]	100.00				

NO.	QUANTITY	UNIT	DESCRIPTION	UNIT PRICE	EXTENSION
			PURCHASE ORDER		
			CONFIRMING ORDER -- DO NOT DUPLICATE.		
[illegible]	1.[illegible]	[illegible]	ADVANCE TECH TM CURRICULUM SEE ATTACHED ORDER FORM	1,569.[illegible]	1,569.
[illegible]2	1.[illegible]	EA	SHIPPING/HANDLING	220.[illegible]	220.

Authorized Signature [signature] Date 3-4-97

TOTAL ▶ [illegible]

IMPORTANT NOTICE: THE VENDOR SHALL PROVIDE A M.S.D.S. WITH EACH ORIGINAL ORDER OF A HAZARDOUS CHEMICAL AS DEFINED IN

80

Page

CONTACT COPY

FERRIS STATE UNIVERSITY
AUTOMOTIVE CENTER 101
708 CAMPUS DRIVE
BIG RAPIDS, MI 49307-2281

F A X C O V E R S H E E T

DATE: 2/28/97 **TIME:**

TO: Susan Hacker **PHONE:** **FAX:**

FROM: Vic Fowler **PHONE:** 616-592-5986 **FAX:** 616-592-5982

RE:

CC:

Number of pages including cover sheet: 4

Message:

PLEASE REMEMBER THAT THE W.M.B.A. HAS DONATED $1600.00 TOWARDS THE PURCHASE OF THE CURRICULUM.

AB-727
3530
1600.00 FROM WMBA

OUR PORTION
$1663.00
+ 228.00 SHIPPING
$1896.00
500.00
2396
G/119649

ADVANCE-TECH™ CURRICULUM CONTINUED

DESCRIPTION	MANUALS	PART #	QTY	PRICE EACH		SUB TOTAL
STIMATING SUBJECT						
Analyzing Damage	Instructor Kit*	AT-ESTI-5A-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-ESTI-5A-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Creating a Damage Report Manually	Instructor Kit*	AT-ESTI-5B-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-ESTI-5B-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Creating a Computerized Damage Report	Instructor Kit*	AT-ESTI-5C-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-ESTI-5C-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
PLASTIC REPAIR SUBJECT						
Identification and Repair Decisions	Instructor Kit*	AT-PLAS-6A-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-PLAS-6A-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Adhesive Repair	Instructor Kit*	AT-PLAS-6B-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-PLAS-6B-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Welding Repair	Instructor Kit*	AT-PLAS-6C-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-PLAS-6C-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Repair of Padded Dashes	Instructor Kit*	AT-PLAS-6D-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-PLAS-6D-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
SMC Repair	Instructor Kit*	AT-PLAS-6E-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-PLAS-6E-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Refinishing of Plastics	Instructor Kit*	AT-PLAS-6F-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-PLAS-6F-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
MECHANICAL AND ELECTRICAL REPAIR SUBJECT						
Steering and Suspension	Instructor Kit*	AT-MECH-7A-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-MECH-7A-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Electrical and Electronic Systems	Instructor Kit*	AT-MECH-7B-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-MECH-7B-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Brake Systems	Instructor Kit*	AT-MECH-7C-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-MECH-7C-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Air Conditioning Systems	Instructor Kit*	AT-MECH-7D-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-MECH-7D-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Cooling Systems	Instructor Kit*	AT-MECH-7E-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-MECH-7E-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Drive Trains	Instructor Kit*	AT-MECH-7F-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-MECH-7F-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Fuel, Intake, and Exhaust Systems	Instructor Kit*	AT-MECH-7G-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-MECH-7G-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Restraint Systems	Instructor Kit*	AT-MECH-7H-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-MECH-7H-S-00		$ 4.50 U.S.	$ 6.50 CDN	$

Method of Payment:

- ○ P.O.# G 1196 49
- ○ Personal Check (Payable To: I-CAR Education Foundation)
- ○ American Express
- ○ Mastercard
- ○ VISA

NAME ON CARD TODAY'S DATE

ACCOUNT NUMBER EXPIRATION DATE

CARDHOLDER SIGNATURE

SUB TOTAL	
PAGE 1 SUB TOTAL	
PAGE 2 SUB TOTAL	
TOTAL	1668.00
IN THE **UNITED STATES**, ADD 7% SHIPPING AND HANDLING**	228.00
IN **CANADA**, ADD 15% SHIPPING AND HANDLING**	
IN **ILLINOIS**, ADD 8.25% SALES TAX	
TOTAL	
IN CANADA, ADD 7% GST GST #R126680735	
GRAND TOTAL	1896.00

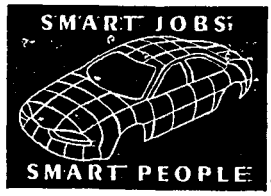
*Instructor Kit includes an Instructor Manual, Student Manual, and Videos

Thank you for your order!

ADVANCE-TECH™ CURRICULUM

DESCRIPTION	MANUALS	PART #	QTY	PRICE EACH		SUB TOTAL
NON-STRUCTURAL REPAIR SUBJECT						
Preparation	Instructor Kit*	AT-NSTR-1A-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-NSTR-1A-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Panel Replacement & Alignment	Instructor Kit*	AT-NSTR-1B-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-NSTR-1B-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Working With Trim & Hardware	Instructor Kit*	AT-NSTR-1C-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-NSTR-1C-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Metal Straightening	Instructor Kit*	AT-NSTR-1D-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-NSTR-1D-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Using Body Fillers	Instructor Kit*	AT-NSTR-1E-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-NSTR-1E-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Door Skin & Intrusion Beam Replacement	Instructor Kit*	AT-NSTR-1F-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-NSTR-1F-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Quarter Panel Replacement	Instructor Kit*	AT-NSTR-1G-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-NSTR-1G-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Moveable Glass & Hardware	Instructor Kit*	AT-NSTR-1H-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-NSTR-1H-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
STRUCTURAL REPAIR SUBJECT						
Damage Analysis	Instructor Kit*	AT-STRU-2A-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-STRU-2A-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Straightening Structural Parts	Instructor Kit*	AT-STRU-2B-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-STRU-2B-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Full & Partial Panel Replacement	Instructor Kit*	AT-STRU-2C-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-STRU-2C-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Stationary Glass Replacement	Instructor Kit*	AT-STRU-2D-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-STRU-2D-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Restoring Corrosion Protection	Instructor Kit*	AT-STRU-2E-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-STRU-2E-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
WELDING AND CUTTING SUBJECT						
MIG (GMAW) Welding	Instructor Kit*	AT-WELD-3A-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-WELD-3A-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Cutting & Heating Processes	Instructor Kit*	AT-WELD-3B-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-WELD-3B-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Advanced Welding Methods	Instructor Kit*	AT-WELD-3C-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-WELD-3C-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
REFINISHING SUBJECT						
Safety & Environmental Practices	Instructor Kit*	AT-REFI-4A-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-REFI-4A-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Understanding Automotive Finishes	Instructor Kit*	AT-REFI-4B-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-REFI-4B-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Preparing the Surface for Refinishing	Instructor Kit*	AT-REFI-4C-I-K	/	$ 4.50 U.S.	$ 131.00 CDN	$
	Student Manual	AT-REFI-4C-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Preparing the Equipment, Paint Area & Refinish Materials	Instructor Kit*	AT-REFI-4D-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-REFI-4D-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Tinting	Instructor Kit*	AT-REFI-4E-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-REFI-4E-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Applying the Finish	Instructor Kit*	AT-REFI-4F-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-REFI-4F-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Blending	Instructor Kit*	AT-REFI-4G-I-K	/	$ 4.50 U.S.	$ 131.00 CDN	$
	Student Manual	AT-REFI-4G-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Solving Paint Application Problems	Instructor Kit*	AT-REFI-4H-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-REFI-4H-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Finish Defects, Causes & Cures	Instructor Kit*	AT-REFI-4I-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-REFI-4I-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
Detailing	Instructor Kit*	AT-REFI-4J-I-K	/	$ 95.00 U.S.	$ 131.00 CDN	$
	Student Manual	AT-REFI-4J-S-00		$ 4.50 U.S.	$ 6.50 CDN	$
					SUB TOTAL	

*Instructor Kit includes an Instructor Manual, Student Manual, and Videos.



I-CAR EDUCATION FOUNDATION

ORDER FORM

Mail form with payment information or fax form with credit card information to:

Attn: Order Processing
I-CAR Education Foundation

In the United States,
3701 Algonquin Rd., Ste. 400
Rolling Meadows, IL 60008
1.800.ICAR.USA
FAX 1.800.590.1215

In Canada,
1020 Brock Rd., Ste. 1005
Pickering, ON L1W 3H2
1.800.565.ICAR
FAX 1.800.831.3034

TODAY'S DATE:

BILL TO:	SHIP TO:
SCHOOL OR BUSINESS NAME: FERRIS STATE UNIVERSITY	SCHOOL OR BUSINESS NAME: FERRIS STATE UNIVERSITY
STREET ADDRESS (NO P.O. BOXES PLEASE): AUTO CENTER-708 BLDG/STE/RM #: CAMPUS DR	STREET ADDRESS (NO P.O. BOXES PLEASE): AUTO CENTER-708 BLDG/STE/RM #: CAMPUS DR.
CITY: STATE/PROVINCE: ZIP/POSTAL CODE: BIG RAPIDS, MI 49307	CITY: STATE/PROVINCE: ZIP/POSTAL CODE: BIG RAPIDS, MI 49307
DAYTIME PHONE: 616-592-2655 FAX NUMBER: 616-592-5982	DAYTIME PHONE: 616-592-2655 FAX NUMBER: 616-592-5982
ATTENTION: VIC FOWLER	ATTENTION: VIC FOWLER

PROGRAM ASSISTANCE

DESCRIPTION	PART #	QTY	PRICE EACH		SUB TOTAL
HANDBOOK: HOW TO ESTABLISH AND OPERATE A SUCCESSFUL COLLISION REPAIR TRAINING PROGRAM					
Quantities of 1 - 4	TX-SALE-00-H-00		$ 12.95 U.S.	$ 17.95 CDN	$
Quantities of 5 - 10	TX-SALE-00-H-00		$ 9.95 U.S.	$ 13.95 CDN	$
Quantities of 11 - 50	TX-SALE-00-H-00		$ 6.95 U.S.	$ 9.95 CDN	$
Quantities of 51 or more	TX-SALE-00-H-00		CALL FOR DISCOUNTS		$
VICA COMPETITION BOOKLET	TX-TEST-00-H-00		FREE		$ 0

INDUSTRY IMAGE MATERIALS

DESCRIPTION	PART #	QTY	PRICE EACH		SUB TOTAL
SMART JOBS/SMART PEOPLE CAMPAIGN MATERIALS					
Speaker's Kit (1 Video, 25 Brochures, 1 Lapel Pin, 25 Stickers)	SP-SALE-00-K-00		$ 19.95 U.S.	$ 27.95 CDN	$
Stickers (per 50)	SP-SALE-00-S-00		$ 5.00 U.S.	$ 7.00 CDN	$
Careers Brochure (per 25)	CB-SALE-00-B-00		$ 10.00 U.S.	$ 14.00 CDN	$
Lapel Pin	LP-SALE-00-L-01	1 - 49	$ 2.50 U.S.	$ 3.50 CDN	$
		50 or more	$ 2.00 U.S.	$ 3.00 CDN	$
LOOKING PROUD! SHOWING THE COLLISION TECHNICIAN IN PRINT AND VIDEO	F95003		FREE		$ 0
				SUB TOTAL	

SMART JOBS
SMART PEOPLE™

I-CAR EDUCATION FOUNDATION

3701 Algonquin Road, Suite 400
Rolling Meadows, IL 60008
1.800.ICAR.USA ■ 847.590.1191 ■ 847.590.1215 FAX

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708 CAMPUS DR
BIG RAPIDS, MI 49307

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03/05/97		UPS GROUND	CUSTOMER PAY	IN ADVANCE

ORDERED BY	REQ. DATE	LOCATION	ORDER ENTERED BY:	REGION
	03/12/97	00001	BRIAN NEILSON	I-CAR MANUAL

ITEM NO.	DESCRIPTION	QUANTITY ORDERED	QUANTITY BACK ORD.	QUANTITY SHIPPED
AT-NSTR-1A-I-K	ADV TECH 1A INSTRUCTOR KIT (PREP)	✓ 1		
AT-NSTR-1B-I-K	ADV TECH (1B) INSTR KIT (PANEL REPL)	✓ 1		
AT-NSTR-1C-I-K	ADV TECH (1C) INSTR KIT (TRIM/HRDWR)	✓ 1		
AT-NSTR-1D-I-K	ADV TECH (1D) INSTR KIT(METAL STRAIGHT.)	✓ 1		
AT-NSTR-1E-I-K	ADV TECH (1E) INSTR KIT (BODY FILLERS)	✓ 1		
AT-NSTR-1F-I-K	ADV TECH (1F) INSTR KIT (DOOR SKIN)	✓ 1		
AT-NSTR-1G-I-K	ADV TECH (1G) INSTR KIT (QTR PANEL)	✓ 1		
AT-NSTR-1H-I-K	ADV TECH (1H) INSTR KIT (GLASS/HRDWR)	✓ 1		
AT-STRU-2A-I-K	ADV TECH 2A INSTRUCTOR KIT (DAMAGE)	✓ 1		
AT-STRU-2B-I-K	ADV TECH 2B INSTR KIT (STRAIGHTENING)	✓ 1		
AT-STRU-2C-I-K	ADV TECH 2C INSTR KIT (PANEL REPLCMT)	✓ 1		
AT-STRU-2D-I-K	ADV TECH 2D INSTR KIT (GLASS REPLCMT)	✓ 1		
AT-STRU-2E-I-K	ADV TECH 2E INSTR KIT (CORROSION)	✓ 1		
AT-WELD-3A-I-K	ADV TECH 3A INSTRUCTOR KIT (MIG WELD)	✓ 1		
AT-WELD-3B-I-K	ADV TECH 3B INSTRUCTOR KIT (CUT/HEAT)	✓ 1		
AT-WELD-3C-I-K	ADV TECH 3C INSTRUCTOR KIT (ADV METHODS)	✓ 1		
AT-REFI-4A-I-K	ADV TECH (4A) INSTR KIT (SAFETY)	✓ 1		
AT-REFI-4B-I-K	ADV TECH (4B) INSTR KIT (FINISHES)	✓ 1		

WORK ORDER NO.

SMART PEOPLE™

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03/05/97		UPS GROUND	CUSTOMER PAY	IN ADVANCE

ORDERED BY	REQ. DATE	LOCATION	ORDER ENTERED BY:	REGION
	03/12/97	00001	BRIAN NEILSON	I-CAR MANUAL

ITEM NO.	DESCRIPTION	QUANTITY ORDERED	QUANTITY BACK ORD.	QUANTITY SHIPPED	PRICE	EXTENSION
[illegible]-REFI-4C-I-K	ADV TECH (4C) INSTR KIT (SURFACE PREP)	✓ 1				
AI-REFI-4D-I-K	ADV TECH (4D) INSTR KIT (EQPMT. PREP)	✓ 1				
AI-REFI-4E-I-K	ADV TECH (4E) INSTR KIT (TINTING)	✓ 1				
AI-REFI-4F-I-K	ADV TECH (4F) INSTR KIT (APPL.FINISH)	✓ 1				
AI-REFI-4G-I-K	ADV TECH (4G) INSTR KIT (BLENDING)	✓ 1				
AI-REFI-4H-I-K	ADV TECH (4H) INSTR KIT (APPL. PROBLEMS)	✓ 1				
AI-REFI-4I-I-K	ADV TECH (4I) INSTR KIT (FINISH DEFECTS)	✓ 1				
AI-REFI-4J-I-K	ADV TECH (4J) INSTR KIT (DETAILING)	✓ 1				
AI-ESTI-5A-I-K	ADV TECH 5A INSTR. KIT (DAMAGE)	✓ 1				
AI-ESTI-5B-I-K	ADV TECH 5B INSTR. KIT (MANL REPORT)	✓ 1				
AI-ESTI-5C-I-K	ADV TECH 5C INSTR. KIT (COMPUTR REPORT)	✓ 1				
AI-PLAS-6A-I-K	ADV TECH (6A) INSTR KIT (IDENTIFICATION)	✓ 1				
AI-PLAS-6B-I-K	ADV TECH (6B) INSTR KIT (ADHESIVE REPAIR	✓ 1				
AI-PLAS-6C-I-K	ADV TECH (6C) INSTR KIT (WELDING REPAIR)	✓ 1				
AI-PLAS-6D-I-K	ADV TECH (6D) INSTR KIT (DASH REPAIR)	✓ 1				
AI-PLAS-6E-I-K	ADV TECH (6E) INSTR KIT (SMC REPAIR)	✓ 1				
AI-PLAS-6F-I-K	ADV TECH (6F) INSTR KIT (PLAS. REFINISHG	✓ 1				
AI-7A-I-K	ADV TECH (7A) INSTR KIT (STEER/SUSP)	✓ 1				

WORK ORDER NO.

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SMART PEOPLE™

I-CAR EDUCATION FOUNDATION

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Rolling Meadows, IL 60008
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BIG RAPIDS, MI 49307

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03/05/97		UPS GROUND	CUSTOMER PAY	IN ADVANCE

ORDERED BY	REQ. DATE	LOCATION	ORDER ENTERED BY:	REGION
	03/12/97	00001	BRIAN NEILSON	I-CAR MANUAL

ITEM NO.	DESCRIPTION	QUANTITY ORDERED	QUANTITY BACK ORD.	QUANTITY SHIPPED	[illegible]	[illegible]
AT-MECH-7B-I-K	ADV TECH (7B) INSTR KIT (ELEC. SYSTEMS)	✓ 1				
AT-MECH-7C-I-K	ADV TECH (7C) INSTR KIT (BRAKE SYSTEMS)	✓ 1				
AT-MECH-7D-I-K	ADV TECH (7D) INSTR KIT (A/C SYSTEMS)	✓ 1				
AT-MECH-7E-I-K	ADV TECH (7E) INSTR KIT (COOL. SYSTEMS)	✓ 1				
AT-MECH-7F-I-K	ADV TECH (7F) INSTR KIT (DRIVE TRAINS)	✓ 1				
AT-MECH-7G-I-K	ADV TECH (7G) INSTR KIT (FUEL/EXHAUST)	✓ 1				
AT-MECH-7H-I-K	ADV TECH (7H) INSTR KIT (RESTRAINT SYS) MECHANICAL/ELECTRICALL REPAIR	✓ 1				

					FREIGHT
					228.00

WORK ORDER NO.
[illegible]

Electronic Measuring System

Hein-Werner
Collision Repair Equipment Group
PO Box1606 * Waukesha WI 53187-1606
PH 800-84SHARK * FX 414/542-3022

SPECIAL VOTEC DISCOUNT

SOLD TO:
FERRIS STATE UNIVERSITY
AUTOBODY REPAIR
BIG RAPIDS MI 49307

DATE 9/17/97
P.O. #
TERMS
SHIP VIA Best Way

SHIP TO:
FERRIS STATE UNIVERSITY
AUTOBODY REPAIR
BIG RAPIDS MI 49307

SPECIAL → JOHN LEONARD AGREED TO SPECIAL ALLOWANCE & FREE GOODS/PHONE 9/17/97
→ STAFF ESCROW REQUESTED SHIPMENT 10/1/97

PART NO	DESCRIPTION	UNIT PRICE	T	TOTAL
H5000000	Shark Computerized Electronic Measuring S	30,995.00	1	$27,508.06
H5007700	Dual Position Riser Ramps	$2,069.00	1	$0.00
H5000100	Shark User Support Package (3yrs)	$6,600.00	1	$0.00
			Subtotal:	$27,508.06
			Freight:	$0.00
			Installation:	$0.00
			Sales Tax:	$0.00
			Total:	$27,508.06
			DownPayment:	$0.00
			Balance Due:	$27,508.06

To: Ken Baushke
From: Greg Key Auto Service and Auto Body Program Coordinator
9-22-97

Subject: Purchase of a sonar measuring system for the Auto Body program.

The computerized sonar measuring system is the new industrial standard for the auto body industry.

We must have a system that will work with all six of our different frame machines.

The purchase of the shark sonar measuring system for frame striating was a recommendation from our Auto Body Advisor Committee meeting.

At this time there is only one sonar measuring system available and to my knowledge there is only one supplier of the system. I have checked with other vendors and feel confident we will be unable to duplicate this purchase anywhere. I am requesting we be allowed to proceed with this purchase without the bid process. The purchase price will be $ 27,508.06.

That supplier is Altra Products Supply Inc.

Computerized Electronic Measuring System

Bid Specifications

Hein-Werner Corporation • 2110 Pewaukee Road • Waukesha, Wisconsin 53187 • 414/542-6611 • FAX 414/542-3622

1) A computerized electronic measuring system, using ultrasound technology with 4MB of Ram, a fixed disk hard drive that has 80MB capacity and one 1.44MB high density diskette drive. A 14" VGA color monitor and an ink jet graphic capable printer is included.

2) The system uses ultrasound to measure both symmetrical and non-symmetrical reference points along with any point whatsoever as a relationship measurement, as well as measuring mulitiple reference points in all three dimensions and accurate to plus or minus one millimeter (1m.m.) tolerences.

3) Machine tool steel attachments and accessories to substantially measure the underside, or any other points chosen (twelve points), including strut towers simultaneously or independently.

4) The system provides specifications and vehicle data, along with on-screen data and scaled graphics of the vehicle and its reference points for the vehicle with mechanical parts in or out, allowing continual measurement of the vehicle during the repair process. Computer screens provide the ability to zoom in to visualize the control or reference point in question. Provides arrows on the screen to help the technician in the repair process.

5) Measures strut towers, separately or together, relative to the lower body specifications.

6) Contains data base of vehicle manufacturers specifications and platform graphics (eight years), including bolts on substructures, for domestic and import vehicles, plus the ability to use the modem in the computer to receive or send data from the factory.

7) Provides on-screen help menus and measures any type of vehicle when specifications arenot available.

8) The system can generate a vehicle data base and is capable of saving vehicle information.

9) Provides a hard copy of numerical and graphic documentation of both the vehicle specifications and the vehicle measurements. A written point-by-point unibody estimate of repair, with accurate point descriptions, to establish damage on the vehicle.

10) Functions independently of any straightening device and does not require any attachment thereto or any special physical requirements. It allows the operator access to the vehicle's repair work area without conflicting with the straightening device. The system does not need to be recalculated even if the equipment is moved.

11) The system complies with all known federal standards and does not have a dangerous laser unit, so it does not require special labeling precautions. Thesystem is an electronic measuring system and has no moving parts to wear or break. The system is not affected by any light reflections and does not require a level surface to operate properly.

12) Hein-Werner will provide training for two technicians for the next three years. They will provide current and future data updates on diskette to the vehicle specification data base; any program software changes; provide user accessible technical assistance; make factory service available; and have a toll free number for additional assistance.

13) Hein-Werner is the company that provides the vehicle specification and data for the system as opposed to relying on other converted information.

14) The system does not require any bridges to be constructed to measure upperbody specifications.

15) Highly machined attachments are limited in number necessary. The quality maintains the accuracy of the system.

29995
27508
2491

3195
2491
704

Hein-Werner®
Collision Repair Equipment Group

Fax Transmission

Date: September 19, 1997 Page: 1 of 2

To: Greg Key cc: cc Fax:
Company: Ferris State University
Fax Number: 616-592-5982

From: Linda Lentz
Fax Number: 414/542-3622

Subject: Shark Bid Specifications

At Dick Post's request, please find the following bid specifications for the Shark Computerized Electronic Measuring System.

2110A Pewaukee Road • Waukesha, Wisconsin 53188 • Phone: 414/542-6611
P.O. Box 1606 • Waukesha, Wisconsin 53187-1606

BLACKHAWK

Altra Products Supply Company

4799 Division
Wayland, MI 49348
(616) 877-0099 FAX: (616) 877-0172

Date: 9/25/97
Salesperson: Dick Post

Quote

Bill To: FERRIS STATE UNIVERSITY
AUTOBODY REPAIR
BIG RAPIDS MI 49307
USA

Ship To: FERRIS STATE UNIVERSITY
AUTOBODY REPAIR
BIG RAPIDS MI 49307
USA

Order ID:	Customer ID:	Salesperson:	Order Date:	Required Date:	Shipped Date:	Ship Via:
11133	FBYED	Dick Post	9/24/97			Best Way

☐ Cash/Check ☐ C.O.D. - 10% Down ☐ 3rd Party Finance
☐ Open Acct Net 30 ☐ Lease ☐ Other

Terms:

Product No.:	Product Name:	Quantity:	Unit Price:	Discount:	Extended Price:
NA	BINDERS FROM AAA	8	$82.00	40%	$393.60
KY160000	CLAMP FRAME ASSM 360 (PR)	2	$694.51	40%	$833.41
KY160001	CLAMP BASE ASSY. 360 (PR)	2	$402.95	40%	$483.54
K0122117	UNIBODY T'S (PR)	2	$715.00	40%	$858.00
40-0075	#75 COMPUSPOT	1	$849.00	40%	$509.40
40-3200	CART FOR 50-200 COMPUSPOT	1	$185.00	40%	$111.00

Subtotal:	$3,188.95
Freight:	$0.00
Installation:	$0.00
Sales Tax:	$6.66
Total:	$3,195.61
DownPayment:	$0.00
Quote Total or Balance Due:	$3,195.61

FERRIS STATE UNIVERSITY, GREG KEY

Dick Post

April 1, 1999

Mr. Sam Mc Farland
BPH Mechanical Services
421 E. Fairplains Street
Greenville, MI 48838

Dear Sam:

I would like to thank you for your investment of $2883 in the Automotive Body program at Ferris State University. This donation was in the form of the installation of a prep station in our Automotive Body lab. The installation was very professionally done and the equipment is performing well and is a great asset to the students' educational process.

Your significant donation is very important to the operation of our programs. We are very fortunate to have friends like you that help us provide a realistic education for the students.

If you like, we would like to have visit our facilities to see this equipment in operation. You can call (616) 592-2895 to make arrangements. Lunch and golf could also be an option.

Thank you again for your support.

Sincerely,

Jack Richards
Acting Dean

Cc: Greg Key

April 1, 1999

Mr. Steve Arndt
FinishMaster Automotive Paint Stores
PO Box 8518
Kentwood, MI 49518-8518

Dear Steve:

I would like to thank you for your investment of $6295 in the Automotive Body program at Ferris State University. This donation was in the form of a discount on the cost of a prep station in our Automotive Body lab. The prep station had a delivered price of $13890 and your charge to us was $7595. The station is installed and it is performing well. It is a great asset to the students' educational process.

Your significant donation is very important to the operation of our programs. We are very fortunate to have friends like FinishMaster that help us provide a realistic education for the students.

If you like, we would like to have visit our facilities to see this equipment in operation. You can call (616) 592-2895 to make arrangements. Lunch and golf could also be an option.

Thank you again for your support.

Sincerely,

Jack Richards
Acting Dean

Cc: Greg Key

AUTO BODY BUDGET ALLOCATIONS

1995	$2954.00
1996	4950.00
1997	6349.00
1998	8425.00
1999	10675.00

SECTION NINE

AUTOMOTIVE BODY PROGRAM

CURRICULUM EVALUATION

CURRICULUM EVALUATION

The fifteen surrounding states and insurance companies have all moved to the new I Car standards for automotive collision repair. Thus the need for educational programs to align themselves with the industry in order to have employment opportunities for there graduates. The Auto Body curriculum is in the process of being switched over to the I Car standard. The process was started when West Michigan Auto Body Association donated money to help purchase the I Car curriculum in 1997. In 1998 we started implementing the I Car standards in to the curriculum. It will take two years to complete the transition of switching the curriculum to the I Car standard. The curriculum changes will be done in year 2000. At that time the auto body faculty will apply for NATEF certification for all areas pertaining to the Auto Body Program.

We just implemented our first articulation agreement with Kent Skills in the Auto Body Program. We are able to do this because Kent Skills is one of the only high school programs that is I Car certified. This allows us to accept their I Car welding certificate for Ferris credit. We also accept two Auto Body courses based off of the standards for articulation which can be seen on the articulation agreement. With more articulation agreement in the future the programs should continue to maintain their stability in enrollment.

The program's curriculum has been upgraded over the past ten year's which includes various new pieces of technology. The major expenditures for the technology are as followed. They are two new down draft paint spray booths, computerized paint mixing, computerized frame measuring, computerized estimating, air handling system, and a new prep station. Various other smaller pieces of equipment such as mig welders, and hand tools have been purchased through the years. All of these major expenditures has afforded the Auto Body Program to be one of the best equipped programs at Ferris. Listed below are the major pieces of technology and how they were funded. The only way this program became so well equipped as you can see is by many different resources both from industry and Ferris.

Major Technology	Cost	Year	School/Company
2 paint spray booths	$200,000	87/88	Building remodel Ferris
Air handling system	$51,000	97	Finish Master/Minor
CAPS			
Computerized frame measuring	$30,000	97	Greg Key/State grant
Frame machine fixtures	$90,000	97	ALTRA Products
Computerized paint mixing	$8,000	98	PPG Industries
Prep Station	$25,000	99	Finish Master/BPH/Voc Ed funds
Computerized estimating	$3,877	99	S & E Budget

STANDARDS FOR AN ARTICULATION AGREEMENT BETWEEN «School» AND FERRIS STATE UNIVERSITY AUTOMOTIVE BODY TECHNOLOGY PROGRAM

For the school and program:

1. Course outline, task lists, evaluation tools, evaluation methods and material packets. A copy to be on file at the Ferris Automotive Center.

For the Auto Instructor:

1. Holds and maintains certification, in the related areas by A.S.E.
2. Include and implement the material covered within the Ferris related course outlines.
3. Provide a written recommendation for the student.

For the Student:

1. A practical and written test given at Ferris State University.
2. Earn a grade of "B" or better in the related secondary level courses.
3. Provide a task list from the secondary level course. It must include dates of task completion and instructor "sign-offs".
4. All articulating students shall meet and maintain entrance requirements and shall have declared a pertinent major at Ferris State University.

Ferris State University

Credits articulated will become part of the total number of credits for program completion at Ferris State University and will appear on the students Ferris transcript by course code, title, and credit hours. No grades will be recorded.

Credit will be granted for the Ferris State University courses listed below, upon completion of the standards.

«School»	Ferris State University	
Welding, ICAR Certificate	WELD 116	3 credits
Auto Body	ABOD 111	4 credits
Auto Body	ABOD 112	6 credits
ACT 19	Math 110	4 credits
Computer Class	Computer Literacy Requirement	

SECTION TEN

AUTOMOTIVE BODY PROGRAM

ENROLLMENT TRENDS

ENROLLMENT TRENDS

Generally we try to start around 30 students every fall semester. As you can see from the Ferris Fact Book we have averaged 48.7 students for the last 10 years. There were a couple of years right after the fiscal restructuring that enrollment dip lower. We feel that was because of the bad publicity when the Auto Machine Program was being closed during restructuring. High school instructors called and told us that they heard all the automotive programs were being closed. In fact the TV news announced that the automotive programs were being closed. After fixing Ferris' image with the high school instructors, we were able to bring our enrollment back to our target of 30 new students per year. The Auto Body Program enrollment for last year was 50. The target enrollment for both years of the Auto Body Program is 50 students The Auto Body Program enrollment has been consistent over the last ten years with an average of 48.7 students..

FERRIS FACT BOOK
ENROLLMENT BY PROGRAM
FALL TERM

1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99
42	55	59	62	48	45	43	42	41	50

The Auto Body Program productivity has increased the last two years because of two reasons. First, the enrollment 1998/99 higher then the last couple of years. Secondly, Carol L. Maki report from Institutional Research shows that retention in the Auto Body Program has steadily been increasing. The returning students for: fall 1996 was 53%, for fall 97 was 76 %, and for fall 98 was 88%.

RETENTION RATES for the University and the Auto Body Program

Retention %	University	Auto Body
1993	55%	67%
1994	52%	69%
1995	56%	53%
1996	59%	76%
1997	60%	88%
Average over 5 years	56%	70.6%

As can be seen by the information the Auto Body Program is way above the University average. The University has had a one percent increase in the last year while the Auto Body Program has had a 12% increase. It must be noted that as you approach 100% it becomes much harder to increase the percentage yet the Auto Body Program has been able to still increase there retention rate.

GRADUATION RATES For the University and the Auto Body Program

Graduations %	University			Auto Body		
	2yr.	3yr.	4yr	2yr.	3yr.	4yr
1993	9%	18%	24%	7%	20%	40%
1994	9%	18%	25%	25%	25%	38%
1995	6%	16%		18%	24%	
1996	10%			36%		

The reason we stopped at the 1996 graduation rate is because you are supposed to use 150% or three years for a two-year program to track graduation rates. As can be seen the Auto Body Program graduation rates are higher every year then the University. Also, the Auto Body Program graduation rate has increased to over three times that of the university in 1996. Furthermore with the retention rate up to 88% in 1997 we expect an even higher graduation rate in 1998/99. One thing I found out as I became program coordinator was that many of our students did not apply for graduation for two reason. It use to cost money and if they were going on to the four year degree they would not apply for a two year degree thus lowering the graduation rates for the two year program. This can be seen in the data from Carol Maki for the years of 1993 and 1994. Where 40% graduated in five years during 1993 and 38% graduated in four year during 1994. This means that the students are graduating during the fourth and fifth year at Ferris. Thus the students are graduating from the four year degree but don't apply for graduation for the two year degree. What I did to correct the poor reporting process was to implement that the advisor have there students fill out the graduation forms during the fourth semester auto body class. This has increased the graduation number to 14 for the 1997/98 year, which can be seen on the College Of Technology Graduation Summary sheet. This means that 14 out of 30 will have graduate during the first two years which, is a 46.6% graduation rate. With a couple of more years of this kind of advising the graduation rate should be around 40 to 50%.

If you look at the information from the fifth year for 1993 with a 40%, the fourth year for 1994 with a 38%, the second year for 1996 with a 36%, and the 1997/98 graduation rate of 46.6% the average graduate rate would be 40.2% after the process was corrected.

All indication are that retention will remain very high approaching 80 to 90%. With high retention rates and the graduation process corrected the graduation rates should continue to follow there rising pattern. With more active advising and other activities such as SLA classes the graduation rates could be moved a little higher yet.

MEMORANDUM

TO: Greg Key

FROM: Carol L. Maki CLM
Director, Institutional Research

SUBJECT: Data Request (Auto Body)

DATE: January 18, 1999

The attached information is in response to your request for data for the Automotive Body program. It includes:

- The number of students entering the program (5 years)
- The number and percentage of students returning to FSU one year later
- The number of students graduating from FSU
- The percentage of students graduating from FSU within two years, three years, four years and five years. Please note: for State and Federal reporting purposes 150% of expected time or 3 years for two year programs is used for the graduation rate.

If you have any questions, please let me know.

Attachments

TABLE 1A

FERRIS STATE UNIVERSITY
Persistence Rates Of Full-Time First-Time Freshmen (%)
Enrolled in Two-Year Programs
Total and by Gender

	Class Entering Fall	Avg. ACT Comp.	Class Size	% Persistence into Fall of Year								
				2	3	4	5	6	7	8	9	10
Total	1989	18.6	1748	64	51	47	46	46	46	45	46	46
	1990	18.4	1595	64	48	45	45	44	45	44	45	
	1991	18.2	1526	60	46	42	40	39	39	40		
	1992	18.2	1451	57	43	39	38	38	38			
	1993	18.2	1613	55	40	36	34	34				
	1994	18.4	1348	52	43	37	36					
	1995	18.2	1479	56	43	39						
	1996	18.2	1408	59	45							
	1997	19.1	1404	60								
	1998	18.8	1411									
Male	1989	18.8	1031	64	51	47	45	45	45	45	45	45
	1990	18.4	917	63	46	43	42	41	39	41	42	
	1991	18.2	960	60	47	42	41	39	39	40		
	1992	18.2	853	58	43	39	37	37	38			
	1993	18.3	994	54	39	36	35	34				
	1994	18.3	775	54	43	37	37					
	1995	18.3	884	55	42	37						
	1996	18.2	826	58	45							
	1997	19.1	817	57								
	1998	18.8	794									
Female	1989	18.2	717	65	51	48	46	47	46	46	46	46
	1990	18.4	678	65	52	49	49	49	50	49	49	
	1991	18.2	566	59	45	42	40	39	39	40		
	1992	18.2	598	55	43	40	39	38	38			
	1993	18.1	619	56	41	36	33	33				
	1994	18.5	573	51	43	37	35					
	1995	18.1	595	58	45	42						
	1996	18.1	582	59	46							
	1997	19.0	587	64								
	1998	18.8	617									

NOTE: For this study, a student is defined as having persisted into a given term if he/she is attending FSU during that term or has previously graduated from any program at FSU. If a student has graduated and continues to be enrolled at FSU, the student is not counted again. Students are not double counted in this study.

TABLE 2A

FERRIS STATE UNIVERSITY
Graduation Rates Of Full-Time First-Time Freshmen (%)
Enrolled in Two-Year Programs
Total and by Gender

	Class Entering Fall	Avg. ACT Comp.	Class Size	% Graduated In 2 Yrs. or Less	3 Yrs. or Less	4 Yrs. or Less	5 Yrs. or Less	6 Yrs. or Less	7 Yrs. or Less	8 Yrs. or Less	9 Yrs. or Less
Total	1989	18.6	1748	11	27	35	41	44	45	45	45
	1990	18.4	1595	13	28	36	41	42	43	44	
	1991	18.2	1526	17	25	31	36	38	39		
	1992	18.2	1451	12	21	28	34	36			
	1993	18.2	1613	9	18	24	30				
	1994	18.4	1348	9	18	25					
	1995	18.2	1479	6	16						
	1996	18.2	1408	10							
	1997	19.1	1404								
	1998	18.8	1411								
Male	1989	18.8	1031	12	27	35	41	43	44	45	45
	1990	18.4	917	14	27	33	38	39	40	41	
	1991	18.2	960	19	26	32	36	38	39		
	1992	18.2	853	12	21	28	33	36			
	1993	18.3	994	11	19	24	30				
	1994	18.3	775	10	19	26					
	1995	18.3	884	8	17						
	1996	18.2	826	13							
	1997	19.1	817								
	1998	18.8	794								
Female	1989	18.2	717	10	26	35	42	45	46	46	46
	1990	18.4	678	12	29	39	46	48	48	48	
	1991	18.2	566	14	22	31	36	37	39		
	1992	18.2	598	11	21	28	34	37			
	1993	18.1	619	5	17	24	30				
	1994	18.5	573	7	16	24					
	1995	18.1	595	5	15						
	1996	18.1	582	6							
	1997	19.0	587								
	1998	18.8	617								

NOTE: For this study, a student is determined as having graduated if he/she received a degree in either a two-year or four-year program. If a student graduates in a two-year program, continues at FSU and then graduates again but in a four-year program, the student is not counted again. Students are not double counted in this study.

Ferris State University
AUTOMOTIVE BODY

Class Entering **Fall 1993** #	Returning F94 #	%	1994-95 Grads #	Graduated within 2 Yrs %	1995-96 Grads #	Graduated within 3 Yrs Cumulative %	1996-97 Grads #	Graduated within 4 Yrs Cumulative %	1997-98 Grads #	Graduated within 5 Yrs Cumulative %
15	10	67%	1	7%	2	20%	1	27%	2	40%

Class Entering **Fall 1994** #	Returning F95 #	%	1995-96 Grads #	Graduated within 2 Yrs %	1996-97 Grads #	Graduated within 3 Yrs Cumulative %	1997-98 Grads #	Graduated within 4 Yrs Cumulative %
16	11	69%	4	25%	0	25%	2	38%

Class Entering **Fall 1995** #	Returning F96 #	%	1996-97 Grads #	Graduated within 2 Yrs %	1997-98 Grads #	Graduated within 3 Yrs Cumulative %
17	9	53%	3	18%	1	24%

Class Entering **Fall 1996** #	Returning F97 #	%	1997-98 Grads #	Graduated within 2 Yrs %
25	19	76%	9	36%

Class Entering **Fall 1997** #	Returning F98 #	%
16	14	88%

c:\data\progrevw\gregky99.123

Special Request for Greg Key, 1/18/99

COLLEGE OF TECHNOLOGY
GRADUATION SUMMARY

	93-4	94-5	95-6	96-7	97-8	*98-9*	99-
ABOD	14	6	14	4	*14*	*3+10*	
AEMT	2	10	6	1			
AUSV	45	46	29	29	*50*	*10+12*	
HEQT	21	8	19	31	*28*	*8+18*	
EEIT	15	10	6	18	*10*	*2+10*	
AHEM	41	38	29	34	*29*	*5+9*	
ECNS				1	*3*	*0+2*	
EEET	28	21	22	26	*14*	*2+10*	
HEET	7	5	3	4	*9*	*5+8*	
HEPT					5	*1*	
Total	173	144	128	148	162	*36+79*	
ARCH	29	14	20	29	*23*	*3+24*	
BCTM	15	26	16	23	10	*8+15*	
CETM	7	6	6	12	*4*	*1+8*	
HVAR	11	18	27	19	*30*	*10+29*	
SURT	5	8	2	4	*3*	*1+2*	
CONM	39	24	24	38	*27*	*7+15*	
FMAN	17	9	19	15	*11*	*1+11*	
HVAC	32	19	27	20	*27*	*1+19*	
SURE	21	24	18	18	*19*	*11+11*	
CNAO			4		9		
FENO					*3*	*0*	
FMGO			1	9	*21*	*1*	
PMJO				3	*1*	*1*	
GEIO					*6*	*4*	
Total	176	148	164	190	*194*	*53+134*	
MECH	13	8	16	15	*13*	*4+7*	
MFGT	17	11	8	9	*19*	*2+12*	
PLTT	51	50	50	45	*5*	*22+21*	
PTEC	31	29	31	21	*12*	*8+9*	
TDTD	28	24	20	17	*27*	*5+16*	
TECL	10	5	6	0	*2*	*1*	
WELT	9	13	27	9	*20*	*1+7*	
MFGE	33	30	28	24	*16*	*6+15*	
PDET	19	30	16	24	*29*	*4+19*	
PLTE	50	45	48	70	*60*	*18+18*	
PMGT	20	26	22	16	*14*	*3+6*	
WELE	17	18	11	17	*21*	*0+13*	
QUAL			17	9	*11*	*1+2*	
C-T			(22)	(21)	*(56)*	*(7)*	
Total	298	289	300	276	249	*76+145*	
TOTAL	647	581	592	614	*605*	*166+358*	

CERTIFICATES:

CNAO - Construction Administration
FENO - Field Engineering Management
FMGO - Facilities Mangement
GEIO - Geographic Information
c:summary

HEPT - Electrical Power Generation
PMJO - Project Management (Now Known as ACMO) Advanced Construction

QUAL - Quality Technology

Total includes the Certificates ( )

APPENDIX A
ADMINISTRATIVE PROGRAM REVIEW

Program/Department: Automotive Body/Transportation & Electronics Department

Date Submitted: _____ Dean: _____

Please provide the following information:

Enrollment/Personnel

	Fall 1994	Fall 1995	Fall 1996	Fall 1997	Fall 1998
Tenure Track FTE	3	3	3	3	3
Overload/Supplemental FTEF					
Adjunct/Clinical FTEF (unpaid)					
Enrollment on-campus total*	45	43	41	41	53
Freshman	23	19	27	21	31
Sophomore	14	16	10	20	18
Junior	6	6	4	0	3
Senior	2	2	0	0	1
Masters					
Doctoral					
Enrollment off-campus					

*Use official count (7-day count for semesters, 5-day count for quarters).

Financial

Expenditures*	Fall 1994	Fall 1995	Fall 1996	Fall 1997	Fall 1998
Supply & Expenses	3873	2954	6912	5843	
Equipment	12590	9658	0	45000	
Gifts & Grants	200	140	175	350	

*Use end of fiscal year expenditures.

Other

	AY 93-94	AY 94-95	AY 95-96	AY 96-97	AY 97-98
Number of Graduates* - Total	14	6	14	4	14
- On Campus					
- Off Campus					
Placement of Graduates	90%	90%	90%	90%	90%
Average Salary	21500	22000	22200	24000	
Productivity - Academic Year Average	269	285	339	226	249
- Summer					
Summer Enrollment	3	2	2	2	

*Use total for academic year (F, W, S)

Approved by Academic Senate,

	COLLEGE OF TECHNOLOGY					
	FRESHMAN ADMITTED STUDENTS - 1996					
	MEAN DATA					
	AUTO	CONSTR	ELECT	PRINTING	MFGE	COLLEGE
H.S. GRADE POINT	2.7	2.8	2.7	2.8	2.8	2.7
ACT COMPOSITE	18.4	18.7	18.6	17.5	19.0	18.6
ACT ENGLISH	16.8	16.8	17.0	16.4	16.9	16.8
ACT MATHEMATICS	18.0	19.1	19.2	17.2	19.3	18.8
ACT READING	18.5	18.5	18.2	17.8	18.7	18.5
ACT SCIENCE	20.1	20.0	19.7	18.3	20.7	20.1

FERRIS STATE UNIVERSITY
ACT DATA
FALL 1996
Type 1 Students
Mean - New Test Scores

	ENGL	MANT	READ	SCIENCE	COMPOSITE	H.S. GPA
TECH	16.8	18.8	18.5	20.1	18.6	2.7
BUSINESS	17.6	18.4	19.2	19.9	18.9	2.8
A & S	17.0	17.8	18.5	19.1	18.2	2.6
EDUCATION	16.9	17.3	18.6	18.9	18.0	2.7
AHS	17.3	17.2	18.5	19.0	18.2	2.9
FSU	17.1	18.1	18.7	19.5	18.5	2.7

1. a. Areas of strengths:

Highly qualified faculty
Excellent equipment and training aids
Outstanding industry support
High graduate salaries
Excellent placement record
Strong advisory committee participation

b. Areas of concern:

Increasing tuition costs for students
More time and money needed for faculty development
More money for equipment purchase - We are concerned that the Voc-Ed m
may not be looking for additional equipment money to replace the Voc-E
dollars.

2. Future goals (please give time frame):

Maintain enrollment (fall 1998)

Increase level of corporate support

Minor curriculum realignment to meet changing technical requirements (9

3. Recommendations:

New equipment funding sources
Additional faculty development support
More support to program areas for recruiting
Change faculty work load limits to provide more lab-student contact hour
(18 max. contact hours is not sufficient)

I. Strengths

A. Faculty — *Highly qualified.*

B. Students — *Excellent employment opportunities.*

C. Curriculum — *Updated with I CAR materials.*

D. Facilities — *Well equipped - up to date.*

E. Budget — *Equipment needs well funded over past two years.*

II. Concerns

A. Faculty

B. Students

C. Curriculum — *Being revised and updated with I CAR.*

D. Facilities

E. Budget

III. Future Goals (including time frame)

A. Faculty — *Training on new equipment Fall 1998.*

B. Students

C. Curriculum — *Revise (NATEF standards) in place for Fall 1999.*

D. Facilities

E. Budget

IV. Recommendations

A. Faculty

B. Students — *Maintain enrollment, retention and graduation rate.*

C. Curriculum — *Continue revision*

D. Facilities

E. Budget

DRAFT 7/14/98

1999-00 ADMISSION CRITERIA - COLLEGE OF TECHNOLOGY
ALL TRANSFER APPLICANTS SHOULD BE REFERRED TO THE COLLEGE

For 2+2 options we encourage applications (internal or external) to be submitted by Jan.15

BS DEGREE PROGRAMS	Ent. Pt.	Qta.	G.P.A HS	G.P.A. Col		Program Coordinator	Phone
Auto & Heavy Equip. Mgt.	FW	50/25		2.0	AAS in AS, AB, HET; Math 110 competency required.	Mike Ropele	(616) 592-2361
Comp. Networks & Sys. (2+2)	F	18		2.0	AAS in electronics; Math 126/130 competency required.	Phil Marcotte	(616) 592-2388
3)Comp. Networks & Sys. (0+4)	F	84	2.0	2.0	19 ACT math; Math 116 placement.	Phil Marcotte	(616) 592-2388
Construction Mgt. (2+2)	FW	30		2.0	AAS in AT, BCT, CET; Math 126/130 competency required.	Bob Eastley	(616) 592-2369
1)Const. Mgt. (0+4)	FW	72/30	2.0	2.0	19 ACT Math; Math 116 placement.	Bob Eastley	(616) 592-2369
Elect/Elec. Engr. Tech.	F	36		2.0	AAS in Electronics; Math 126/130 competency required.	Phil Marcotte	(616) 592-2388
Facilities Management	F	20		2.0	AAS in AT; Math 115/116 competency required.	Mel Kantor	(616) 592-2625
Hvy Eqp Ser Engr. Tech.	F	20		2.0	AAS in HET; Math 115/116 competency required.	John Shaltry	(616) 592-2811
HVACR Engr. Tech.	F	20		2.5	AAS in HVAC with a 2.5 GPA; Math 116 competency required.	Mike Feutz	(616) 592-2608
Manufacturing Engr. Tech	F	30		2.5	AAS in MET, MTT, PLT, TD, WEL with 2.5 GPA in math; 2.75 in major; Math 126/130 placement required.	Gary Ovans	(616) 592-2511
Plastics Engr. Tech.	F	30/30		2.5	AAS in Plastics with 2.5 GPA; 2.7 in major and 2.5 in math; Math 126/130 competency required.	Larry Schult	(616) 592-2640
Printing Management	F	30		2.0	AAS in Printing; Math 110 competency required.	Pat Klarecki	(616) 592-2845
Product Design Engr. Tech.	F	30		2.5	AAS in MET or TDTD with 2.5 GPA; 2.5 in Math; 2.75 in major; Math 126/130 placement.	Rick Eldridge	(616) 592-2511
Quality Engr. Tech.	F	30		2.5	AAS in MET, MTT, PLT, TD, WEL with 2.5 GPA in math; 2.75 in major; Math 126/130 placement required. (offered at ATC- Grand Rapids only).	Gary Ovans	(616) 592-2511
Rubber Engineering Tech.	F	25		2.5	AAS in Rubber Tech. with 2.5 GPA; 2.7 in major and 2.5 in math; Math 126/130 competency required.	Stan Smith	(616) 592-2975
2)Surveying Engineering	FW	30	2.0	2.0	24 ACT math; Math 120 placement. For Jr. level entry; Math 230 placement; must have completed a year of engineering physics (Phys 241, 242) and a field surveying course.	Sayed Hashimi	(616) 592-2632
Welding Engr. Tech.	F	20		2.5	AAS in Welding with 2.5 GPA; 2.75 in major; Math 126 placement required.	Ken Kuk	(616) 592-2511

*** See Over

1) 2) 3) Combined Quota

Over →

DRAFT 7/14/18

NOTE: New students must have a minimum 2.0 GPA in High School studies. Transfer applicants (internal and external) with less than a 2.0 GPA who meet mathematics requirements should be referred to the Dean's Office for review.

AAS DEGREE PROGRAMS	Ent. Pte.	Qta.	G.P.A. HS	G.P.A. Col		Program Coordinator	Phone
Architectural Technology	F	66	2.0	2.0	19 ACT math; Math 116 placement.**	Mel Kantor	(616) 592-2625
Automotive Body	F	32	2.0	2.0		Greg Key	(616) 592-2655
Automotive Service	FW	80/20	2.0	2.0	15 ACT math; Math 110 placement.	Greg Key	(616) 592-2655
1)Building Const. Technology	FW	72/30	2.0	2.0	19 ACT math; Math 116 placement.	Bob Eastley	(616) 592-2369
1)Civil Engr. Tech.	FW	72/30	2.0	2.0	19 ACT math; Math 116 placement.	Bob Eastley	(616) 592-2369
3)Electronics (Industrial)	F	84	2.0	2.0	19 ACT math; Math 116 placement.**	Phil Marcotte	(616) 592-2388
Heavy Equip. Techology	FW	40/20	2.0	2.0	19 ACT math; Math 115 placement.	John Shaltry	(616) 592-2811
HVACR Technology	FW	30/20	2.0	2.0	19 ACT math; Math 115 or 116 placement.	Mike Fuetz	(616) 592-2608
Manufacturing Tooling	F	38	2.0	2.0	15 ACT math; Math 110 placement. (19 ACT/Math 116 preferred)	Ken Kuk	(616) 592-2511
Mechanical Engr. Technology	F	50	2.0	2.0	19 ACT math; Math 116 placement.**	Rick Eldridge	(616) 592-2511
Plastics Technology	F	72	2.0	2.0	19 ACT math; Math 116 placement; High School Chem/CHM 103 equiv.	Larry Schult	(616) 592-2650
Printing & Digital Graphic Image	FW	75/35	2.0	2.0		Pat Klarecki	(616) 592-2845
Rubber Technology	F	25	2.0	2.0	19 ACT math; Math 116 placement.	Stan Smith	(616) 592-2975
2)Surveying Technology	FW	30	2.0	2.0	19 ACT math; Math 116 placement.**	Sayed Hashimi	(616) 592-2632
Tech Drafting/Tool Design	F	50	2.0	2.0	15 ACT math; Math 110 placement (19 ACT/Math 116 preferred).	Rick Eldridge	(616) 592-2511
Welding Technology	F	40	2.0	2.0		Ken Kuk	(616) 592-2511

1)2)3): Combined Quotas

** New students with ACT composite below 19 should be reviewed for strengths in courses preparatory for college work.

Over →

SECTION ELEVEN

AUTOMOTIVE BODY PROGRAM

PROGRAM COST

PROGRAM COST

The teaching cost manual was the only cost factor used in previous program reviews. Teaching cost for the program is the only cost figured into the University's teaching cost document. No total cost for any Ferris program is calculated. There is no evaluation of any other costs such as: Administrative cost to a program; cost of staff, student workers, and full time adult workers; building; travel and vehicle use in travel for course work; computers, Voc Ed dollars, S & E, etc. This information is not presented for any of the University programs.

In the 1997 - 1998 teaching cost is now being labeled as program degree costing. This is because they have added two areas to the teaching cost manual and they are the Department cost and the Dean's cost. These are department cost of all staff members and administrators divided through out the department. This is an attempt to see a more comprehensive cost of a program. However, there are still many factors that are not figured in to the cost of a program (see list in pervious paragraph). Furthermore, some programs receive $50,000 for their S&E accounts and other only receives $6,000 to $8,000. Remember that this is a one-year snap shot of a program. In the 1996 year the teaching cost was $202 and in 1997 the teaching cost went down to $181. The enrollment in 1997 was the same as 1996 so I don't know why the teaching cost went down and neither does any one else. Also, the teachers all received a raise that year so the teaching cost should have been higher. Further more, in 1998 the over all enrollments went up 10 students, which is 20% increase so I would expect the cost to go down by that amount next year. So it is very dangerous to look at a one-year window. More over it is important to know what causes the numbers to change and that seems to be somewhat questionable. Teaching/administration cost is only one small part of the cost of delivering an educational program to a student.

Information from the instructional program teaching cost manual includes only teaching cost. Therefore, it is only a piece of the program cost in the program review progress. It includes only teaching salaries and fringe benefits and is taken from the HRS system. All courses that are used in the calculation are from the program check sheets. If the teachers in one program are older and have higher salaries, the program productivity cost will be higher. This does not mean that program is less productive than another program. It simply might indicate that teachers have higher salaried in that program and not how effective the program is in delivering material. This information must not be looked at in a vacuum for any program.

The single most effect on the program cost that can be changed other than reducing administration and staff is enrollment in the program. Therefor, the focus should be on enrollment trends of a program not cost of either teaching or department. Looking at the teaching cost (teachers salaries) of a program of instruction at a public institution and then comparing them against other programs is ludicrous. Some program will always cost more than others.

Ferris State University

Program Teaching Cost 1996 - 1997 (Summer, Fall, and Winter)

Program Name: Automotive Body AAS

College : Technology

Department : Transportation & Electronics

Total Program Teaching Cost (Assumes a student will complete program in one year) **$12,737.27**

Cost per SCH (Average for program) **$202.18**

Program Credits Required (Total credits to graduate) **63**

Course ID	Level	FSU's Teaching Cost	FSU's Student Credit Hours (SCH) Produced	Teaching Cost/SCH	Credits Required	Program Teaching Cost
ABOD111	L	$22,631.45	108.00	$209.55	4.00	$838.20
ABOD112	L	$33,947.18	162.00	$209.55	6.00	$1,257.30
ABOD113	L	$15,630.56	88.00	$177.62	4.00	$710.48
ABOD114	L	$39,502.94	132.00	$299.26	6.00	$1,795.59
ABOD211	L	$10,941.39	40.00	$273.53	4.00	$1,094.14
ABOD212	L	$16,412.09	60.00	$273.53	6.00	$1,641.21
ABOD213	L	$11,519.45	36.00	$319.98	4.00	$1,279.94
ABOD214	L	$17,279.17	54.00	$319.98	6.00	$1,919.91
ABOD215	N	$10,349,211.91	79,107.89	$130.82	4.00	$523.30
CULTELE	E	$1,406,110.14	17,010.00	$82.66	3.00	$247.99
ENGL150	L	$629,538.44	5,982.00	$105.24	3.00	$315.72
ENGL250	L	$421,957.07	4,101.00	$102.89	3.00	$308.67
P[illegible]S130	L	$39,954.60	876.00	$45.61	4.00	$182.44
S[illegible]AELE	E	$1,460,131.13	19,984.00	$73.07	3.00	$219.20
WELD116	L	$9,676.63	72.00	$134.40	3.00	$403.19

Source: Office of Institutional Studies, g:\...\progcost\9697\progcost.rsl

Ferris State University
Degree Program Costing 1997 - 1998 (Summer, Fall, and Winter)

College : Technology
Department : Transportation & Electronics

rogram Name: Automotive Body AAS

Program Credits Required (Total credits to graduate) 63

*Instructor Cost per Student Credit Hour(SCH) (Average for program)	$181.50
**Department Cost per Student Credit Hour	$76.87
***Dean's Cost per Student Credit Hour	$15.88
Total Cost per Student Credit Hour (Average for program)	**$274.25**
Total Program Instructor Cost (Assumes a student will complete program in one year)	$11,434.65
Total Program Department Cost	$4,843.08
Total Program Dean's Cost	$1,000.17
Total Program Cost (Assumes a student will complete program in one year)	**$17,277.90**

Course ID	Level	Instructor Cost	Dept Cost	Dean's Cost	SCH's Produced	Instructor Cost/SCH	Dept Cost/SCH	Dean's Cost/SCH	Credits Required	Program Instructor Cost	Program Dept Cost	Program Dean's Cost
ABOD111	L	$22,631	$7,548	$1,448	80	$283	$94	$18	4	$1,132	$377	$72
ABOD112	L	$33,947	$11,323	$2,172	120	$283	$94	$18	6	$1,697	$566	$109
ABOD113	L	$22,494	$7,171	$1,376	76	$296	$94	$18	4	$1,184	$377	$72
ABOD114	L	$33,742	$10,757	$2,064	114	$296	$94	$18	6	$1,776	$566	$109
ABOD211	L	$10,941	$7,171	$1,376	76	$144	$94	$18	4	$576	$377	$72
ABOD212	L	$16,412	$10,757	$2,064	114	$144	$94	$18	6	$864	$566	$109
ABOD213	L	$11,750	$6,794	$1,303	72	$163	$94	$18	4	$653	$377	$72
ABOD214	L	$17,625	$10,190	$1,955	108	$163	$94	$18	6	$979	$566	$109
ABOD215	L	$11,207	$7,171	$1,376	76	$147	$94	$18	4	$590	$377	$72
ULTELE	E	$1,423,036	$449,669	$160,912	17382	$82	$26	$9	3	$246	$78	$28
ENGL150	L	$669,969	$163,474	$57,206	6273	$107	$26	$9	3	$320	$78	$27
ENGL250	L	$396,226	$104,292	$36,496	4002	$99	$26	$9	3	$297	$78	$27
PHYS130	L	$54,252	$12,218	$4,961	544	$100	$22	$9	4	$399	$90	$36
SOCAELE	E	$1,512,570	$806,455	$209,849	20679	$73	$39	$10	3	$219	$117	$30
WELD116	L	$11,068	$5,514	$1,195	66	$168	$84	$18	3	$503	$251	$54

* Instructor Cost - ***Salary & Fringe*** - the actual cost to teach a course
** Depatment Cost - ***Departmental Level Non Instructor Compensation, Supplies and Equipment*** - departmental average applied to all course prefixes within a department
*** Dean's Cost - ***Dean's Level Non Instructor Compensation, Supplies and Equipment*** - college average applied to all course prefixes within a college

Source: Office of Institutional Research, g:\...\progcost\9798\progcost.rsl

Preface

This is the first edition of the "Degree Program Costs" report. This report contains Department and Dean's Costs in addition to Instructor Costs. Since Ferris switched from a quarter system to a semester system (fall 1993) there have been three editions of "Instructional Program Teaching Costs" reports published. These three editions reflected teaching costs only (faculty salary and fringes). The new report includes departmental and dean's level non instructor compensation, supplies and equipment. The instructor cost data is derived from the Ferris faculty load system. The department and dean's cost data are from the actual year end 1998 spending data from the Finance Office (FRS). The information in this report includes data from summer 1997, fall 1997, and winter 1998. All data in this report is reflective of where a course prefix belonged in the fall of 1997.

Please Note: In the first two editions, 1994-95 and 1995-96, if a faculty member had release time and taught a course, their teaching salary and release time salary were included in the salary used to calculate the teaching costs. In 1996-97 the salary associated with the release time activity was not included in the teaching cost calculations. In this years "Degree Program Costs" report the release time activity is not included in the instructor cost, but is included in the department cost.

As in the past, there are a few courses (primarily special studies) that have been assigned to administrators. These courses have no teaching dollars associated with them although the student credit hours produced are included.

Please remember that cost data of this type must be used with caution and in association with administrative judgment. Any of the cost data included in this report, instructor cost, department cost, or dean's cost, if viewed in isolation, can be misleading.

Methodology

The costing procedure for ***Instructor Cost*** was accomplished by using the Ferris faculty load system data. The costing system uses a faculty member's salary plus the cost of fringe benefits. For 12-month faculty, 33.5% fringe is applied for summer, fall, and winter. For 9-month faculty, 33.5% fringe is applied for fall and winter. For 9-month faculty teaching in the summer and all part-time faculty, 20.7% fringe is applied (FICA and retirement only).

The salary plus fringe is multiplied by the course credit hour and divided by the faculty member's total course credit hours taught. An average cost per course is then determined by dividing the total instructor costs, including fringes, by the SCH's produced by a course. NOTE: University-wide, there are a few courses (primarily special studies) that have been assigned to administrators. These courses have no teaching dollars associated with them but do include the student credit hours produced.

The following is an example of the methodology described above:

	Term Salary	Courses	Course Credits
Joe Smith	$20,000	ARCH 101 211	4
		FMAN 451 211	3
		ACCT 203 211	4

Term Salary		Fringe		Course Credits / Total Credits		Instructor Cost
$20,000	X	1.311	X	4 / 11	=	$9,534.55
$20,000	X	1.311	X	3 / 11	=	$7,150.91
$20,000	X	1.311	X	4 / 11	=	$9,534.55
						$26,220.01

Pooling of all of the instructor costs and SCH's for ARCH101 courses for the year is shown below:

	Instructor Costs		SCH's Produced		
ARCH101211	$9,534.55		76		
ARCH101212	$9,010.71		88		
"	"		"		
"	"		"		
"	"		"		
	$331,916.83	/	2,011	=	$165.05

The costing procedure for ***Department and Dean's Cost*** calculations were accomplished by using the actual year end 1998 spending data from the Finance Office (FRS). The department and dean's cost totals were prorated back to courses based on SCH's produced. Theses totals included non instructor compensation, supplies and equipment. The object codes included in the totals are as follows:

1100 Administrative Professional
1200 Administrative Support
1300 Clerical
142x Release Time Summer
144x Release Time Academic Year
1450 Non Credit Producing (SLA, writing lab, tutors and lab assistants)
1490 Non Teaching Faculty (librarians and counselors)
1495 Non Instructional Assignment in Summer for 9 month Faculty
1600 Adult Part Time
1800 Student Wage
3000 Supply and Expense
7000 Equipment

The following is an example of the methodology used to calculate department and dean's cost:

Department	Dept Cost	Dept SCH's	Cost / SCH
ABC	$238,212	5,163	$46.14

College	Dean's Cost	College SCH's	Cost/SCH
A	$555,233	19,184	$28.94

The departmental and dean's average cost per SCH is then applied to all course prefixes within the department or college. A listing of the Average Department Cost Per SCH for all departments is in Table VIII of the report. A listing of the Average Dean's Cost Per SCH for all Colleges is in Table IX of the report.

To arrive at the total cost for a degree, all courses and credits required for each instructional program were taken from the 1997-98 student checksheets. These were obtained from each instructional department. The cost of each degree assumes a hypothetical situation in which all courses required for the degree would have to be taken in one year.

The following is an example of a hypothetical program at Ferris:

Ferris State University

Degreee Program Costing 1997 - 1998 (Summer, Fall, and Winter)

College: A
Department: ABC

Program Name: WEB Master Certificate

Program Credits Required (Total credits to graduate) 18

Instructor Cost per Student Credit Hour(SCH) (average for program)	$142.28
Department Cost per Student Credit Hour	$41.33
Dean's Cost per Student Credit Hour	$13.61
Total Cost per Student Credit Hour (Average for program)	**$197.22**
Total Program Instructor Cost (Assumes a student will complete program in one year)	$2,561.00
Total Program Department Cost	$744.00
Total Program Dean's Cost	$245.00
Total Program Cost (Assumes a student will complete program in one year)	**$3,550.00**

Course ID	Level	Instructor Cost	Dept Cost	Dean's Cost	SCH's Produced	Instructor Cost/SCH	Dept Cost/SCH	Deans Cost/SCH	Credits Required	Program Instructor Cost	Program Dept Cost	Program Dean's Cost
WEBM101	L	$205,544	$124,657	$36,474	2565	$80	$49	$14	3	$240	$146	$43
WEBM301	U	$22,453	$7,436	$2,176	153	$147	$49	$14	3	$440	$146	$43
WEBM501	G	$54,152	$8,165	$2,389	168	$322	$49	$14	3	$967	$146	$43
FREEELE	E	$1,423,036	$449,669	$160,912	17382	$82	$26	$9	6	$491	$155	$56
LITR287	N	$10,841,552	$3,857,577	$1,547,475	76848	$141	$50	$20	3	$423	$151	$60

Program Credits Required: This number is the total of all the *Credits Required* for a program.

Instructor Cost Per SCH: This number is the result of dividing *Total Program Instructor Cost by Program Credits Required.*

Department Cost Per SCH: This number is the result of dividing *Total Program Department Cost by Program Credits Required.*

Dean's Cost Per SCH: This number is the result of dividing *Total Program Dean's Cost by Program Credits Required.*

Total Cost per Student Credit Hour: This number is the sum of *Cost per Student Credit Hour (Instructor, Dept and Dean's).*

Total Program Instructor Cost: This number is the sum of all the *Program Instructor Costs.*

Total Program Department Cost: This number is the sum of all the *Program Dept Costs.*

Total Program Dean's Cost: This number is the sum of all the *Program Dean's Costs.*

Total Program Cost: This number is the sum of all the *Program Costs (Instructor, Dept and Dean's).*

Course ID: Each course represents all sections for that specific course.

Level: L - Lower (100 and 200 level courses); U - Upper (300 and 400 level courses); G - Graduate (500 and above level courses); E - Elective courses; N - Course not offered during the year.

Instructor Cost: The instructor costs for L, U, and G are explained on the previous pages. The teaching costs for E are explained in Appendix A. The teaching costs for N are explained in Appendix B.

Dept Cost: The dept costs for L, U, and G are explained on the previous pages. The teaching costs for E are explained in Appendix A. The teaching costs for N are explained in Appendix B.

Dean's Cost: The teaching costs for L, U, and G are explained on the previous pages. The teaching costs for E are explained in Appendix A. The teaching costs for N are explained in Appendix B.

SCH's Produced: These numbers represent the total number of student credit hours produced for a specific course (summer, fall and winter).

Instructor Cost/SCH: These numbers are a result of dividing *Instructor Cost* by *SCH's Produced* for a specific course.

Dept Cost/SCH: These numbers are a result of dividing *Dept Cost* by *SCH's Produced* for a specific course.

Dean's Cost/SCH: These numbers are a result of dividing *Dean's Cost* by *SCH's Produced* for a specific course.

Credits Required: These numbers are the total number of credits needed by a student for a specific course. These are the credits required to graduate, listed on the program checksheet.

Program Instructor Cost: These numbers are a result of multiplying the *Instructor Cost/SCH* by the *Credits Required.*

Program Dept Cost: These numbers are a result of multiplying the *Dept Cost/SCH* by the *Credits Required.*

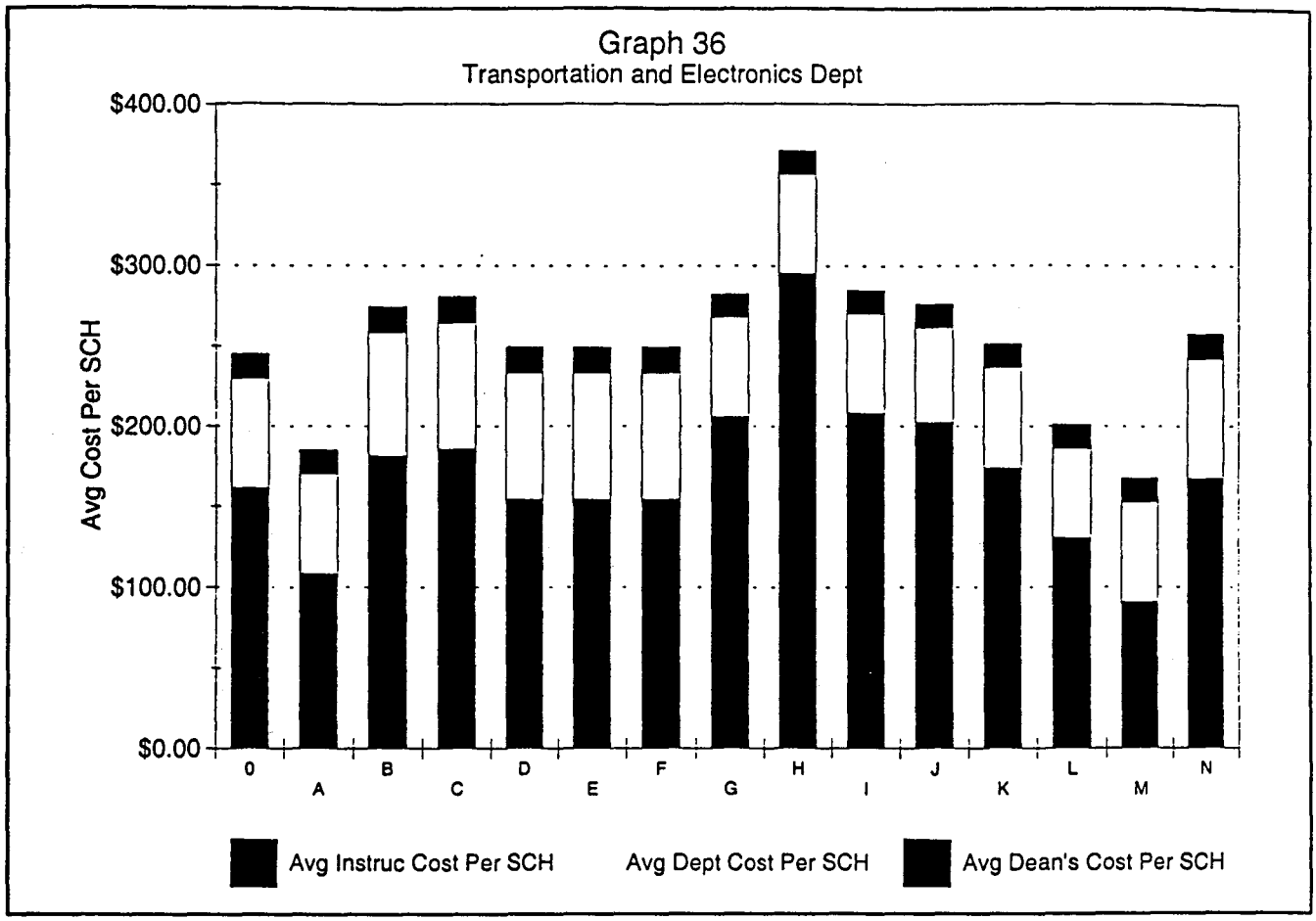
Program Dean's Cost: These numbers are a result of multiplying the *Dean's Cost/SCH* by the *Credits Required.*

In the graph section of the report please note that the average Instructor, Dept and Dean's Cost/SCH are averages for all of the courses needed to complete a degree within the particular Colleges (graphs 2-10) and Departments (graphs 3-37). This includes average Dept and Dean's Costs from *other* departments and colleges i.e. the Dept and Dean's Cost for ENGL and MATH are included in the costing of a program in the College of Business. The *unique* Average Department and Dean's Cost per SCH for colleges and departments can be found in Tables VIII and IX of the report.

See Appendix A for the costing of elective courses within a program. See appendix B for the costing of courses not yet offered.

Ferris State University

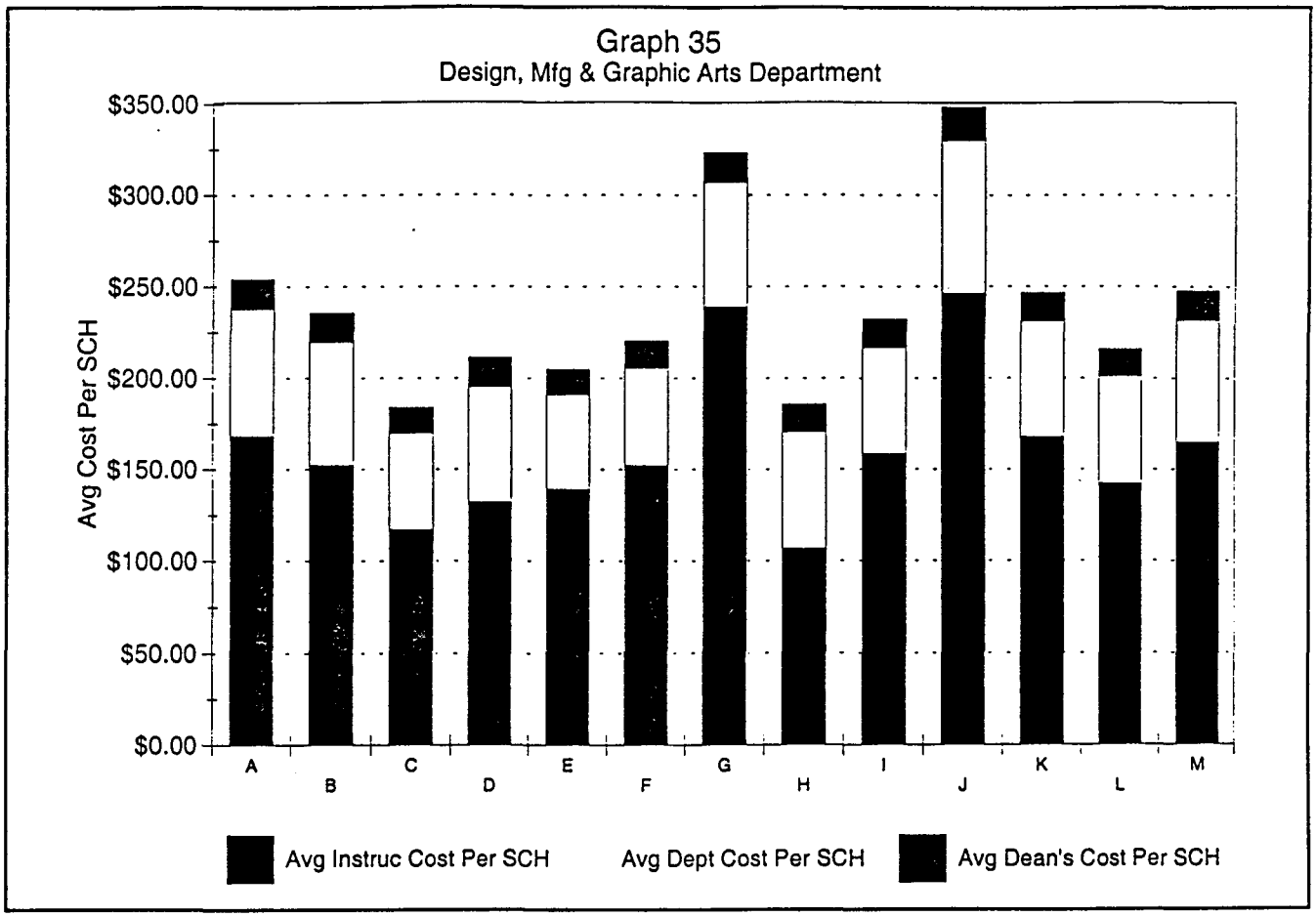
Average Instructor, Department and Dean's Cost Per SCH for Degree Programs
Transportation and Electronics Department
1997 - 1998 Data



	Programs	Avg Instructor Cost/SCH	Avg Dept Cost/SCH	Avg Dean's Cost/SCH
A	Automotive and Heavy Equipment Mgt BS (Yrs 3 & 4)	$108.72	$61.75	$14.70
B	Automotive Body AAS	$181.50	$76.87	$15.88
C	Automotive Service Technology AAS	$185.87	$78.64	$16.04
D	Automotive Service Technology AAS (Chrysler Apprentice opt)	$154.52	$78.64	$16.04
E	Automotive Service Technology AAS (Ford ASSET opt)	$154.52	$78.64	$16.04
F	Automotive Service Technology AAS (General Motors ASEP opt)	$154.52	$78.64	$16.04
G	Computer Networks & Systems BS (Communications Track)	$206.01	$61.79	$14.27
H	Computer Networks & Systems BS (Embedded Systems Track)	$294.94	$61.79	$14.27
I	Computer Networks & Systems BS (Indust Automation Track)	$208.40	$61.79	$14.27
J	Computer Networks & Systems BS (Information Systems Track)	$202.51	$59.09	$14.30
K	Electrical/Electronics Engr Technology BS (Yrs 3 & 4)	$174.18	$62.53	$14.30
L	Heavy Equipment Service Eng Tech/Maint Opt BS (Yrs 3 & 4)	$130.72	$55.59	$14.82
M	Heavy Equipment Service Eng Tech/Mfg Opt BS (Yrs 3 & 4)	$91.11	$61.75	$14.72
'	Heavy Equipment Technology AAS	$167.66	$74.36	$15.56
.	Industrial Electronics Technology AAS	$161.76	$68.19	$14.94

Source: Office of Institutional Research, g:\...\progcost\9798\avgp7t.rsl

Ferris State University
Average Instructor, Department and Dean's Cost Per SCH for Degree Programs
Design, Manufacturing & Graphic Arts Department
1997 - 1998 Data



	Programs	Avg Instructor Cost/SCH	Avg Dept Cost/SCH	Avg Dean's Cost/SCH
A	Manufacturing Engineering Technology BS (Yrs 3 & 4)	$168.44	$69.36	$15.86
B	Manufacturing Tooling Technology AAS	$152.33	$67.31	$15.64
C	Mechanical Engineering Technology AAS	$117.24	$52.87	$13.73
D	Plastics Engineering Technology BS (Yrs 3 & 4)	$132.29	$62.98	$15.76
E	Plastics Technology AAS	$139.36	$51.81	$13.42
F	Printing Management BS (Yrs 3 & 4)	$152.42	$53.29	$14.26
G	Printing Technology AAS	$238.74	$67.80	$15.98
H	Product Design Engineering Technology BS (Yrs 3 & 4)	$106.99	$63.78	$14.81
I	Quality Engineering Technology BS (Yrs 3 & 4)	$158.67	$58.09	$15.17
J	Quality Technology Certificate	$245.92	$83.54	$18.10
K	Technical Drafting and Tool Design AAS	$167.90	$63.09	$15.07
L	Welding Engineering Technology BS (Yrs 3 & 4)	$142.42	$58.70	$14.34
M	Welding Technology AAS	$165.06	$66.72	$15.47

Source: Office of Institutional Research, g:\...\progcost\9798\avgp7d.rsl

Table IV

Degree Program Costing
Instructor Cost Per SCH Ranked High to Low
1997-98

Program Name	Program Credits Required	Total Instructor Cost*	Instructor Cost Per SCH
Optometry OD (Yrs 3,4,5 & 6)	163	$75,442.53	$462.84
Computer Networks & Systems BS (Embedded Systems Track)	136	$40,111.42	$294.94
Indust & Environ Hlth Mgt (Gen Env Hlth option) BS	134	$30,872.58	$230.39
Computer Networks & Systems BS (Indust Automation Track)	136	$28,342.18	$208.40
Computer Networks & Systems BS (Communications Track)	136	$28,017.37	$206.01
Computer Networks & Systems BS (Information Systems Track)	137	$27,743.37	$202.51
Pharmacy/All Options Pharm.D (Yrs 6 & 7)	71	$28,089.78	$395.63
Biotechnology BS	130	$27,866.52	$214.36
Surveying Engineering BS	138	$21,273.03	$154.15
Indust & Environ Hlth Mgt (Haz Waste option) BS	130	$19,987.84	$153.75
Accountancy/Finance BS	137	$21,119.73	$154.16
Indust & Environ Hlth Mgt (Indust Safety option) BS	121	$19,181.67	$158.53
Medical Technology (Integrated) BS	136	$17,475.90	$128.50
Television Production BS	128	$15,417.48	$120.45
Indust & Environ Hlth Mgt (Indust Hyg option) BS	127	$18,605.74	$146.50
Business Education/Marketing/Distributive Edu BS	155	$16,627.00	$107.27
Business Education/General Business BS	155	$16,626.65	$107.27
Computer Information Systems/Marketing BS	145	$17,725.33	$122.24
Actuarial Science BS	120	$20,766.61	$173.06
Computer Information Systems/Management BS	153	$17,629.13	$115.22
Accountancy/Computer Information Systems BS	139	$17,796.47	$128.03
Construction Management BS (Highway/Bridge Track)	130	$17,118.53	$131.68
Public Relations BS	124	$17,362.52	$140.02
Retailing BS	127	$16,559.97	$130.39
Opticianry AAS	68	$17,012.01	$250.18
Professional Tennis Management BS	126	$16,293.64	$129.31
Accountancy (Public Accounting Track) BS	124	$16,668.56	$134.42
Chemistry Education BS	152	$15,360.42	$101.06
Accountancy (Cost/Managerial Track) BS	124	$16,332.16	$131.71
Social Work BSW	128	$16,712.64	$130.57
Mathematics Education BS	144	$15,439.37	$107.22
Advertising BS	125	$15,708.10	$125.66
Accountancy (Professionally Directed Track) BS	124	$15,724.89	$126.81

* Instructor Cost - ***Salary & Fringe***

Source: Office of Institutional Research, g:\...\progcost\9798\icrank.rsl

Table IV

Degree Program Costing
Instructor Cost Per SCH Ranked High to Low
1997-98

Program Name	Program Credits Required	Total Instructor Cost*	Instructor Cost Per SCH
Finance BS	125	$16,298.42	$130.39
Music Industry Management BS	124	$15,156.04	$122.23
Insurance/Real Estate BS	124	$15,902.30	$128.24
Construction Management BS (Commercial/Industrial Track)	130	$14,380.26	$110.62
Marketing/Sales BS	124	$14,936.45	$120.46
Dental Technology AAS	61	$13,410.26	$219.84
Nuclear Medicine Technology BS	128	$14,707.11	$114.90
Health Care Systems Administration BS	128	$14,472.72	$113.07
Health Information Management BS	123	$14,615.21	$118.82
Computer Information Systems BS	129	$14,284.90	$110.74
Applied Speech Communication BS	126	$14,517.15	$115.22
Insurance BS	124	$14,784.02	$119.23
Printing Technology AAS	65	$15,518.27	$238.74
Marketing BS	124	$14,330.53	$115.57
International Business BS	127	$14,579.86	$114.80
Recreation Leadership & Mgt/Outdoor-Adv Edu Track BS	128	$13,616.05	$106.38
Recreation Leadership & Mgt/Corp Fitness-Well Track BS	128	$13,324.71	$104.10
Recreation Leadership & Mgt/Leisure Service Track BS	128	$13,356.41	$104.35
Recreation Leadership & Mgt/Sports Management Track BS	128	$13,398.40	$104.68
Manufacturing Engineering Technology BS (Yrs 3 & 4)	79	$13,307.06	$168.44
Professional Golf Management BS	124	$13,134.25	$105.92
Pharmacy BS (Yrs 3,4 & 5)	94	$11,642.06	$124.51
Operations Management BS	125	$13,518.44	$108.15
Public Administration BS	124	$12,623.66	$101.80
Biology Education BS	122	$12,603.81	$103.31
Automotive Service Technology AAS	68	$12,639.41	$185.87
Quality & Productivity Management BS	124	$12,754.01	$102.85
Small Business Management BS	123	$12,893.51	$104.83
Human Resource Management BS	122	$13,029.97	$106.80
Applied Mathematics BS	120	$14,567.06	$121.39
Management BS	123	$13,121.81	$106.68
Nursing AAS	72	$11,531.86	$160.16
Business Administration BS	124	$12,153.19	$98.01
Technical and Professional Communication BS	121	$12,448.15	$102.88

* Instructor Cost - ***Salary & Fringe***

Source: Office of Institutional Research, g:\...\progcost\9798\icrank.rsl

Table IV

Degree Program Costing
Instructor Cost Per SCH Ranked High to Low
1997-98

Program Name	Program Credits Required	Total Instructor Cost*	Instructor Cost Per SCH
Electrical/Electronics Engr Technology BS (Yrs 3 & 4)	69	$12,018.53	$174.18
Automotive Body AAS	63	$11,434.65	$181.50
Visual Communication BS (Yrs 3 & 4)	64	$13,349.28	$208.58
Heavy Equipment Technology AAS	67	$11,233.14	$167.66
Wage Earning Home Economics Education BS (Yrs 3 & 4)	98	$11,276.39	$115.07
Dental Hygiene AAS	77	$7,945.07	$103.18
Allied Health Education BS (Yrs 3 & 4)	99	$11,021.72	$111.33
Automotive Service Technology AAS (Chrysler Apprentice opt)	68	$10,507.56	$154.52
Automotive Service Technology AAS (Ford ASSET opt)	68	$10,507.56	$154.52
Automotive Service Technology AAS (General Motors ASEP opt)	68	$10,507.56	$154.52
Technical Education BS (Yrs 3 & 4)	98	$11,021.72	$112.47
Welding Technology AAS	68	$11,224.12	$165.06
English Education BS	120	$10,530.86	$87.76
Technical Drafting and Tool Design AAS	67	$11,249.22	$167.90
Industrial Electronics Technology AAS	67	$10,837.62	$161.76
Nursing BSN (Yrs 3 & 4)	84	$9,809.34	$116.78
Manufacturing Tooling Technology AAS	68	$10,358.47	$152.33
Applied Biology (Pre-Veterinary Medicine Track) BS	120	$10,670.39	$88.92
Applied Biology BS	120	$10,663.11	$88.86
Applied Biology (Pre-Medicine Track) BS	120	$10,663.11	$88.86
Applied Biology (Sports Medicine Track) BS	120	$10,663.11	$88.86
Applied Biology (Pre-Dentistry Track) BS	120	$10,663.11	$88.86
Quality Engineering Technology BS (Yrs 3 & 4)	68	$10,789.57	$158.67
Welding Engineering Technology BS (Yrs 3 & 4)	73	$10,396.41	$142.42
Applied Biology (Pre-Physical Therapy Track) BS	120	$10,555.02	$87.96
Training in Business and Industry BS (Yrs 3 & 4)	99	$10,126.30	$102.29
Medical Laboratory Technology AAS	70	$8,896.33	$127.09
Construction Management BS from Arch Tech (Yrs 3 & 4)	83	$9,454.75	$113.91
Plastics Technology AAS	69	$9,616.09	$139.36
Printing Management BS (Yrs 3 & 4)	64	$9,754.91	$152.42
Medical Technology (Career Mobility) BS (Yrs 3 & 4)	72	$9,182.97	$127.54
Facilities Management BS (Yrs 3 & 4)	68	$9,820.14	$144.41
Plastics Engineering Technology BS (Yrs 3 & 4)	64	$8,466.71	$132.29
Civil Engineering Technology AAS	63	$9,806.81	$155.66

* Instructor Cost - ***Salary & Fringe***

Source: Office of Institutional Research, g:\...\progcost\9798\icrank.rsl

Table IV

Degree Program Costing
Instructor Cost Per SCH Ranked High to Low
1997-98

Program Name	Program Credits Required	Total Instructor Cost*	Instructor Cost Per SCH
Heavy Equipment Service Eng Tech/Maint Opt BS (Yrs 3 & 4)	66	$8,627.32	$130.72
Legal Assistant AAS	64	$10,243.09	$160.05
Architectural Technology AAS	66	$9,085.76	$137.66
Surveying Technology AAS	61	$9,616.31	$157.64
Product Design Engineering Technology BS (Yrs 3 & 4)	68	$7,275.30	$106.99
Automotive and Heavy Equipment Mgt BS (Yrs 3 & 4)	67	$7,284.02	$108.72
HVACR Technology AAS	68	$8,121.48	$119.43
CJ/Law Enforcement Option BS (Yrs 3 & 4)	67	$7,949.99	$118.66
Mechanical Engineering Technology AAS	65	$7,620.68	$117.24
Hospitality Management BS (Yrs 3 & 4)	63	$7,892.13	$125.27
HVACR Engineering Technology BS (Yrs 3 & 4)	65	$7,568.16	$116.43
Heavy Equipment Service Eng Tech/Mfg Opt BS (Yrs 3 & 4)	66	$6,013.38	$91.11
Retailing AAS	67	$7,347.00	$109.66
Food Service Management AAS	63	$7,418.01	$117.75
Ornamental Horticulture Technology AAS	60	$7,958.92	$132.65
CJ/Corrections Option BS (Yrs 3 & 4)	65	$6,992.93	$107.58
Building Construction Technology AAS	63	$7,068.53	$112.20
Health Information Technology AAS	63	$6,844.36	$108.64
CJ/Generalist Option BS (Yrs 3 & 4)	64	$6,689.26	$104.52
Real Estate AAS	63	$7,471.30	$118.59
Criminal Justice Administration MS	30	$8,378.69	$279.29
Radiography AAS	78	$4,908.03	$62.92
Nuclear Medicine Technology AAS	66	$5,942.50	$90.04
Industrial Chemistry Technology AAS	63	$7,938.02	$126.00
Visual Communication AAS	66	$6,325.64	$95.84
Child Development AAS	63	$5,879.88	$93.33
Pre-Teaching (Elementary or Secondary) AA	65	$6,154.46	$94.68
Pre-Criminal Justice AA	64	$5,681.36	$88.77
Respiratory Care AAS	69	$4,358.33	$63.16
General Business AAS	63	$5,568.28	$88.39
Directed Studies AA	60	$5,513.17	$91.89
Career Exploration AA	60	$5,390.15	$89.84
Collegiate Skills Program AA	60	$5,292.87	$88.21
Career and Tech Educ/Career & Tech Instr MS	32	$5,509.57	$172.17

* Instructor Cost - ***Salary & Fringe***

Source: Office of Institutional Research, g:\...\progcost\9798\icrank.rsl

Table IV

Degree Program Costing
Instructor Cost Per SCH Ranked High to Low
1997-98

Program Name	Program Credits Required	Total Instructor Cost*	Instructor Cost Per SCH
Applied Speech Communication AA	60	$5,225.64	$87.09
Career and Tech Educ/Postsecondary Admin MS	32	$5,189.01	$162.16
Pre-Social Work AA	60	$5,077.04	$84.62
Pre-Law AA	60	$5,074.42	$84.57
Liberal Arts AA	60	$5,064.96	$84.42
Career and Tech Educ/Human Resource Dev MS	31	$5,280.20	$170.33
Pre-Mortuary Science AS	60	$5,132.98	$85.55
Pre-Optometry AS	60	$5,132.98	$85.55
Pre-Engineering AS	60	$5,123.52	$85.39
Pre-Pharmacy AS	60	$5,123.52	$85.39
Info Systems Mgt/Quality Improvement Emphasis MS	31	$5,189.37	$167.40
Info Systems Mgt/Accounting Emphasis MS	31	$4,914.64	$158.54
Info Systems Mgt/Information Systems Emphasis MS	31	$4,119.57	$132.89
Career and Tech Educ/Administrative Cert MS	32	$3,493.53	$109.17
Public Relations Certificate	12	$3,646.44	$303.87
Quality Technology Certificate	12	$2,951.09	$245.92
Advertising Certificate	14	$3,025.68	$216.12
Insurance Certificate	12	$3,293.33	$274.44
Advanced Studies in Global Logistics Certificate	12	$2,819.77	$234.98
Marketing Research Certificate	12	$2,526.69	$210.56
Mainframe Computer Certificate	12	$2,407.84	$200.65
International Business Certificate	12	$2,583.98	$215.33
Advanced Studies in Investment Analysis Certificate	12	$2,493.94	$207.83
Retailing Certificate	12	$1,940.39	$161.70
Construction Field Engineering Certificate	15	$1,660.30	$110.69
Midrange Computer Certificate	12	$2,001.16	$166.76
Real Estate Certificate	9	$2,321.16	$257.91
Marketing Sales Certificate	12	$1,958.11	$163.18
Marketing Certificate	12	$1,748.96	$145.75
Construction Project Management Certificate	12	$1,650.86	$137.57
Quality Improvement for Managers Certificate	9	$1,926.42	$214.05
Construction Administration Certificate	12	$1,595.33	$132.94
Hospitality Management Certificate	12	$1,560.66	$130.05
Food Service Management Certificate	12	$1,523.71	$126.98

* Instructor Cost - ***Salary & Fringe***

Source: Office of Institutional Research, g:\...\progcost\9798\icrank.rsl

Table IV

Degree Program Costing
Instructor Cost Per SCH Ranked High to Low
1997-98

Program Name	Program Credits Required	Total Instructor Cost*	Instructor Cost Per SCH
Computer Literacy Certificate	12	$1,462.78	$121.90
Small Business Management Certificate	12	$1,545.18	$128.77
Direct Marketing Certificate	12	$1,320.59	$110.05
Multimedia Production Certificate	12	$1,155.74	$96.31

* Instructor Cost - ***Salary & Fringe***

Source: Office of Institutional Research, g:\...\progcost\9798\icrank.rsl

SECTION 12

AUTOMOTIVE BODY PROGRAM

CONCLUSION

1. **The Automotive Body Program mission is central to the mission of Ferris State University.**
   The mission of the Automotive Body technology program is to prepare students for the employment in the Auto Body repair field, and to supply an avenue for further education and to be participative members of society.

2. **Uniqueness/Visibility and demand by students**
   These responses from this review reinforce once more the Auto Body program's ability to produce high-quality, highly employable graduates. Once more, the number of those who would consider a Ferris Bachelor's degree in AHM or who already has earned one suggests that the program educates as well as trains its students. The starting pay of Ferris State University graduates from the Auto Body Program is $25,165 taken from the alumni survey in section #2. The starting pay for the Ferris State University graduates is not only higher then the starting pay for the nation and state it is equivalent to the median salary of all auto body technicians ($12/hr). Our graduate's present salary averages are $54,803 year. This annual salary of the Ferris State University Auto Body Program is $18,142 higher than the state average of $36,661. This shows the money making ability of a person with a degree from Ferris. The current combination of the theoretical and technological phases offered by the auto body program and the professional and financial success of its graduates, prove this to be a strong, vital program now, and for the future of the university.

3. **Service to State And Nation and demand for graduates:**

   Our labor market analysis from MOIS, West Michigan Auto Body Association, and Alumni Survey indicates a strong demand for our graduates, as evidenced by their placement rate and their high salaries.

Starting pay

Under $10,000	1	(in 1971)
$10,000-15,000	5	
$16,000-20,000	3	
$21,000-25,000	4	
$26,000-30,000	2	
$31,000-39,000	3	
$40,000 plus	2	
unreported or commission	7	

Current pay

$21,000-30,000	2
$31,000-40,000	6
$41,000-50,000	3
$51,000-80,000	7
$81,000-100,000	1

4. **Quality of Instruction (insert from survey 6-10)**

The program's curriculum has been upgraded over the past ten year's, which includes various new pieces of technology. The major expenditures for the technology are as followed. They are two new down draft paint spray booths, computerized paint mixing, computerized frame measuring, computerized estimating, air handling system, and a new prep station. Various other smaller pieces of equipment such as mig welders, and hand tools have been purchased through the years. All of these major expenditures has afforded the Auto Body Program to be one of the best equipped programs at Ferris. Listed below are the major pieces of technology and how they were funded. The only way this program became so well equipped as you can see is by many different resources both from industry and Ferris.

Question 6 through 10 sought data on the respondents' placement and preparation for their career:

Whether they experienced difficulty securing their first job after graduation
What phase of their education did they feel most valuable
What ASE certifications were they able to obtain based on FSU coursework
What should be changed about the Auto Body curriculum
How effective was the lab experience in preparing them for employment
What changes should be made

Placement difficulty

Yes 2
No 28
- 5 had jobs lined up at graduation
- 5 noted the auto body field has a shortage of skilled people
- 1 attributed his employment to Ferris State University's reputation
- 2 continued in the Automotive Management program

Phase of education found most valuable

Hands-on experience in the auto body labs	16
All courses in the Auto Body curriculum	9
Welding classes and experience	3
Business and management classes	3

ASE/Michigan certification obtained

Painting and refinishing	16
Structural analysis and damage repair	10
Damage analysis and damage repair	7
Mechanical and electrical components	8

Effectiveness of course work as preparation for work in their field

Excellent	2
Very Good	14
Good	9
Deficient	1

Program should have apprenticeship geared toward work in a dealership, emphasizing quality-timework.

Recommended changes to the Auto Body curriculum

- Greater emphasis on speed in all phases of work
- Keep up with current technology (3 responses)
- More emphasis on quality
- Importance of retaining good instruction
- More use of computers
- Greater inclusion of I-CAR training
- Add a one-semester co-op or internship
- More instruction in business management
- Emphasize the importance of continuing education

Effectiveness of the Auto Body lab experience as preparation for work in their field

Excellent	6
Very good	10
Good	13
Fair	1
Deficient	1 work pace is too slow

Recommended changes to the Auto Body labs

- Greater speed
- Push students to get I-CAR and State Certification before graduation
- More use of computers
- More structural diagnosis
- More emphasis on what to expect when they enter the work force (3)
- Stay current with industry practices (2)
- Use products beyond PPG
- More in-depth painting study (chemistry and testing)

5. Service to Non-majors

Welding program teaches one of the auto body courses for the program.

6. Facilities and equipment

Administration has been very successful in obtaining industrial support in terms of equipment donations and scholarships from major corporations. With our donations of vehicles and other equipment, and training from industry, we receive around 1/2 of a million dollars in donations every year on a continuing rotational basis. As you can see the quality of the Auto Body Program is financially linked to industry.

Major Technology	Cost	Year	School/Company
2 paint spray booths	$200,000	87/88	Building remodel Ferris
Air handling system	$ 51,000	96	Finish Master
Computerized frame measuring	$ 30,000	97	Greg Key/State grant
Frame machine fixtures	$ 90,000	97	ALTRA Products
Computerized paint mixing	$ 8,000	98	PPG Industries
Prep Station	$ 25,000	99	Finish Master/BPH/Voc Ed funds
Computerized estimating	$ 3,877	99	S & E Budget
Chain less anchors (frame machine)	$ 6,050	99	Voc Ed dollars (special)

With the chart below you can see the S & E money has been increased every year for the last 5 years. The S & E money is not as large as some programs however it seems to be very ample for the program. At the present time I see no major expense needs for the auto body program that could not be handle by their voc ed and S & E monies. I see no need to increase their S & E or their voc ed monies at this time. The Auto Body Program is one of the best equipped programs at Ferris State University. However, one must note how the monies came into the program. There was a plan for the equipment however the monies came from many different sources that can not be counted on in the future. This is why the present level of funding from voc ed and S & E monies need to remain.

AUTO BODY S&E BUDGET ALLOCATIONS

1995	$2,954.00
1996	$4,950.00
1997	$6,349.00
1998	$8,425.00
1999	$10,675.00

7. Library information Resources

Library information resources are good.

8. Faculty: professional and scholarly activies

All faculty attend professional schools every year in the Auto Body Program.

Summary

As can be seen by the MOIS there are only 9 colleges that offer at least a course in auto body. Some of these programs are not in operation and many only offer a course or certificate. There are three programs in the state and they are Lansing, Oakland and Washtenaw Community College. Of the three-auto body programs only Washtenaw is an academic program. All the rest are what are known as hobby shop type of a program. This is where students work on their own vehicles instead of going through a structure program curriculum. With Ferris being the major supplier of auto body technician in the state there will always be a critical shortage of technicians in the state of Michigan. The Auto Body Program enrollment has been constant at 48 for the past ten years. It seems that the auto body program is one of the most consistent and well-funded programs in the university.

SECTION 13

AUTOMOTIVE BODY PROGRAM

RECOMMENDATIONS

RECOMMENDATIONS

CONTINUE THE PROGRAM

The program meets or exceeds all criteria and it warrants a rating of continuance to meet the manpower needs in the State on Michigan as demonstrated by MOIS, employer survey, and the alumni survey. The budgets for the Auto Body Program seems to meet their present needs. Both the S&E and Voc. Ed. Budgets have had slight increases in the past few years. There were a few years that the Auto Body Program didn't receive any Voc. Ed. monies. Sense the Voc Ed. Funds can now be dispensed with more input from the University and if the auto body program keeps getting its share there would be no need for additional monies.

Sense the facility, equipment, and budget are all in good shape the only thing to work on is to make the enrollment as consistence as possible. Although the enrollment has been very consistence at 48.5 students enrolled per year over the last 10 years. There are some years that are high and some that are low. It is our goal to increase enrollment in the low years which would make the enrollment more consistence. At present, we expect steady enrollment in the program. We have just started our first articulation agreement and are working on many more. We expect this to help stabilize our enrollment. The Auto Body program just finished building its own recruiting truck. This year they showed it at three shows, the Grand Rapids Auto Rama, ST. Ingnace car show, and the Traverse City Cherry festival car show. By the way the truck placed first in Grand Rapids, and second place in Traverse City car show. The recruiting truck will be used to take to high schools for recruiting this coming school year. Again, we expect this to help keep enrollment next fall. This coming year the Auto Body Program will become NATEF certified. This will allow us to have a articulation agreement with all high schools and colleges in the nation that are NATEF certified. We started these agreements in the Auto Service Program and they have been very successful to the point of having to close our enrollment for the fall of 99. We started four students from one high school articulation agreement in Indiana this year alone. These type of agreements should allow for a steady enrollment in the program. We are also looking into becoming a General Motors sponsored body program. The Auto Body program has one of the best equip facility in the university. With the budget adequate and the enrollment being stable as possible, the program warrants a continuance rating.

VITA

JAMES A. BIGELOW

EDUCATION: Associates Degree in Auto Body Repair,
Ferris State University, 1970.

Bachelor Degree in Trade Technical Teaching,
Ferris State University, 1983.

WORK EXPERIENCE: Body Shop Manager, Body shop Repairman, and Automotive Painter.

TEACHING EXPERIENCE: Technical Instructor, Ferris State University, 1973 to present.

Recent Industrial Courses/ Workshops:

- DuPont Paint Seminar
- Sikkens Paint Seminar
- State Farm Insurance Estimating Seminar
- Unibody I-car Seminar
- 3-M Plastic Repair Seminar
- P.P.G. Paint Seminar
- General Motors Paint Matching and Tinting
- Spray Finishing Safety Seminar
- Acme Paint Workshop
- Martin Senior Paint Workshop
- Hunter 4-Wheel Alignment

Industrial Courses Workshops:

- Automotive Service Excellence (A.S.E) Certification. Structural, Non-Structural, and Refinishing, expires - July 2001.

- Michigan Occupational Competency Assessment Center, Master Examiner for Auto Body Repair - 1994 through 2000.

- Mitchell International Advanced computer Assisted Auto Collision Estimating - July 1999.

- P.P.G. Refinishing Training Course, Vo-Tech. Training - July 1999.

- SEM Plastic Repair - September of 1997, 1998 and 1999.

- Shark Electronic Measuring System - December 1997.
- The Continuing Education Unit.
- Ferris State University, National Association of College Automotive Teachers Seminar. Basic electrical trouble shooting and wiring diagrams - July 1990.
- Chief Automotive Systems, Ferris State University, theory and Principle of Structural Damage Analysis - July 1990.
- Chief Automotive Systems, Ferris State University, Unitized Vehicle Repair Demonstration - July 1990.
- Blackhawk Automotive, Ferris State University, Measuring and Body Correction of the 1990's - July 1990.
- P.P.G. Industries, Ferris State University, Tri-coat repairs - July 1990.
- 3-M Company, Ferris State University, APV Plastic Repair Techniques - July 1990.
- 3-M Company, Ferris State University, Plastic Finishing and Painting - July 1990.
- P.P.G. Industries, Ferris State University, Hazardous Chemicals and Environmental Factors - July 1990.
- DuPont Paint, Ferris State University, Chroma Base Cronar Paint System - July 1990.
- General Motors training Seminar, Ferris State University. Seminar included base coat, clear coat paint repair, color adjustment and new tri-coat paint repair procedures - August 29, 1989 to July 1, 1989.
- Total Wheel Alignment Seminar, Ferris State University - March 1989.
- ICAR Unibody Frame Repair and Measuring, Ann Arbor, Michigan. New techniques and equipment involved with unibody repair and measuring - February 1988.
- Sikkens product Seminar, Traverse City, Michigan. New product information and demonstrations - July 1988.
- Auto Body Electrical Component Safety and Repair, Delta Community College. Hands on participation of wiring procedures and repair - November 1988.
- Estimating, Michigan state University. Vocational Education Personnel Development Project - March 1987.

Post-tenure Review

Gary Edgerly

Auto-Body Repair

Ferris State University

December 1998

Teaching Experience

A. Ferris State University, Big Rapids, Michigan, 1976 to present.

1. ABOD 113, Refinishing & Panel Repair (4 Credits)
   ABOD 114, Applied Refinishing & Panel Repair (6 Credits)
   22 contact hours per week

2. ABOD 211, Frame and Unibody Repair (4 Credits)
   ABOD 212, Applied Frame & Unibody Repair (6 Credits)
   22 contact hours per week

3. A-B 161, Introduction to Auto Body Repair
   24 contact hours per week
   20 lab hours - 4 lecture hours

4. A-B 162, Body Refinishing
   24 contact hours per week
   20 lab hours - 4 lecture hours

5. A-B 163, Panel Repair & Replacement
   24 contact hours per week
   20 lab hours - 4 lecture hours

6. A-B 164, Body & Frame Correction
   24 contact hours per week
   20 lab hours - 4 lecture hours

7. A-B 262, Advanced Body Repair Processes
   24 contact hours per week
   20 lab hours - 4 lecture hours

Teaching Experience Continued:

B. Responsibilities included with the Auto Body Floor Coordinator position from the above classes:

1. Supervision of students working on customer vehicles.
2. Oversee scheduling of all vehicles that students work on — must be sure jobs are of educational value.
3. Control equipment and service material inventories.
4. Secure specifications and order new equipment.
5. Coordinator, repair of equipment and support facilities.
6. Assist in parts procurement and inventory control in crib.
7. Handle customer complaints.
8. Coordinate job placement interviews between sixth semester students and industry.
9. Academic advising of students.
10. Coordinate building and support maintenance.

Related Work Experience

A. 1965

Automotive body repair, Bollingers, Lakeview, Michigan

B. 1965 - 67

U.S. Army, Intelligence Specialist

C. 1967 - 69

Automotive body repair, Bollingers, Lakeview, Michigan

D. 1970 - 76

Automotive Body Shop Manager, Youngman's, Lakeview Michigan. Supervise technicians, write estimates, customer relations, negotiate with insurance adjusters.

E. Ongoing automotive body work on various vehicles during summer months. Customer repairs, insurance repairs, and antique restoration. Research new product line, equipment and procedures.

Educational Experience

A. Bachelor of Science Degree, Ferris State University
February 20, 1981

B. Industrial Course Workshops:

1. Maguire Product Demonstration, Montcalm Auto Parts, Greenville, MI. October 1998.

2. Shark Electronics Measuring System, Waukeshaw, WI. Five Day School. December 1997.

3. A.S.E. Certification. Master Collision Repair/Refinish Technician in the following four areas: Painting & Refinishing, Nonstructural Analysis & Damage Repair, Structural Analysis & Damage Repair, Mechanical & Electrical Components. December 1997.

4. I-CAR Collision Repair 2000. Eight Day School. Grand Rapids, MI. November-December 1996.

5. New Science of Unibody Repair, Blackhawk Automotive Inc., Waukeshaw, WI. Five Day School, July 1993.

6. SEM Products Training, Ferris State University, January 1993.

7. Vocational Instructors Program, PPG Industries, Flint Training Center, Flint, MI. Five Day School, July 1992.

8. Acme Paint Workshop, Lakeview, MI. May 1992.

9. Dupont Vo-Tech Class, Four Day School, Troy, MI. July 1991.

10. Sikkens Paint Workshop, Traverse City, MI.

11. National Association of College Automotive Teachers Seminar (NACAT), Ferris State University, July 1990.

    - Chief Automotive System: Theory and Principle of Structural Damage Analysis. The two hour seminar covered theory and principle of structural damage including collision theory, direct and indirect damage, gauging and analyzing the damage.

Educational Experience Continued:

NACAT Continued:

- Chief Automotive Systems: Unitized Vehicle Repair Demonstration. The two hour seminar covered analyzing and repairing structural misalignment.

- Blackhawk Automotive: Measuring and body correction of the 1990s. The two hour seminar covered analyzing direct and indirect damage, estimating repair times, analyzing proper procedures for repair.

- PPG Industries: Tri-Coat repairs. The two hour hands-on workshop demonstrated correct repair procedures of GM Tri-Coat finishes.

- 3-M Company: APV Plastic Repair Techniques. The two hour seminar covered proper repair techniques for today's plastic vehicles.

- 3-M Cccompany: Plastic Finishing and Painting. The two hour seminar covered correct finishing and painting procedures of repaired plastic panels.

- PPG Industries: Hazardous Chemicals and Environmental Factors. The one hour seminar covered how to work with hazardous chemicals and maintain a safe environment.

- Dupont Paint: Chroma Base Color Paint System. The two hour seminar covered correct application of state-of-the-art paint finishes.

12. General Motors Training Seminar, Ferris State University. The 32 hour seminar included base coat, clear coat paint repair, color adjustment and the new tri-coat paint repair procedures. August 1989.

13. Total Wheel Alignment Seminar, Ferris State University. This eight hour seminar covered the importance of four wheel alignment. March 1989.

14. Unibody Frame Repair and Measuring, Ann Arbor, MI. An eight hour seminar covering new techniques and equipment involved with unibody repair and measuring. February 1988.

Educational Experience Continued:

15. ICAR Conference, Chicago, IL. July 1988. Five day conference.

16. Auto Body Electrical Component Safety and Repair, Michigan State University, Lansing, MI. Eight hour seminar with hands-on participation of wiring procedures and repair. November 1988.

17. Hunter Four Wheel Alignment Workshop. Holland, MI. October 1987.

18. Acme Paint Workshop, Lakeview, MI September 1987.

19. General Motors Paint Matching and Tinting, Ferris State University, May 1987. Three day workshop.

20. Dupont Paint, Ferris State University, April 1987. One day workshop.

21. Computerized Estimating, One day workshop sponsored by Michigan State University and State Farm Insurance Company. Detroit, MI. March 1987.

22. PPG Paint, One day workshop. February 1987.

23. Automotive Plastic Repair. One day workshop sponsored by Michigan State University and 3-M Company covering all aspects of repairing and refinishing automotive plastics. Lansing, MI. November 1986.

24. Martin Senour Paint Workshop, Big Rapids, MI. March 1985.

25. Spray Finishing Safety, Michigan State University. Eight hour seminar Vocational Educational Personnel Development Project. Lansing, MI. October 1985.

26. Unibody Collision Repair Workshop, Michigan State University. Eight hour workshop. November 1983.

27. 3-M Systems for Automotive Refinishing Seminar, November 1983. 24 Hour Workshop.

28. The New Science of Unibody Repair, Blackhawk Training Center. 32 hour course in unibody repair. November 1982.

Educational Experience Continued:

29. G.M. Tech Center, Three hour seminar on front end alignment, Ferris State University. February 1979.

30. Applied Power Korek Training Workshop, Blackhawk Industries. Milwaukee, WI. Five day workshop on frame and unibody repair. December 1977.

Contributions to Ferris Beyond Teaching

A. Department Responsibilities, 1976 to present:

1. Ongoing research to update and secure equipment in Auto Body Labs.
2. Actively counsel and advise auto body students.
3. Assist students in securing jobs in local automotive establishments while in school
4. Assist graduating students in securing jobs.
5. Ongoing faculty training to provide out students with the most up to date technical education.
6. Updating students tool list and supply list.

B. Program Responsibilities, 1976 to present:

1. Order materials for Auto Body Lab.
2. Participated in restoration of 1927 International Truck used for recruiting, summer 1983.
3. Participated in Alumni Phone-A-Thon to secure donations for Automotive Programs

C. Committee Participation:

1. Participated in State VICA Prioject.
2. Principal member of visitaion team, Michigan Occupational Competency Assessment Center.
3. Equipment Purchasing Committee member.
4. Assisted with student recruitment on Recruiting Committee.
5. Auto Body Advisory Board Committee member.
6. Department Tenure Committee.
7. NATAF 2000 Committee.
8. Transportation & Electronics Curriculum Committee.

Contributions to Ferris Continued:

D. Curriculum Development.

1. Department curriculum development for Auto Body Repair, 1989 and 1990

2. Worked with the Welding faculty to create a more appropriate welding class designed for Automotive Body students. 1990/91.

3. Development of curriculum revision for Semester Transition. 1991/92.

4. Curriculum Revision. 1996/97.

5. Auto Body Program Review. 1997-Present.

E. Student Activities, Alumni, Student Recruitment.

1. Worked on phone-a-thon for incoming students.

2. Follow-up on recruiting inquiries with a letter and telephone call.

3. Called instructors from high school and vocational centers for recruiting opportunities.

4. Recruiting visits to area skill centers and vocational education centers.

5. Recruiting booth at Finish Master Trade Shows. 1991, 1992, 1993, 1994, 1995.

6. Recruiting for a semester instead of teaching. 1996.

7. Recruiting: Career Day at Muskegon area schools at L.C. Walker Arena, Farewell Community Schools, Kent Skill Center, Auto Value Trade Show Recruiting in Lansing. 1997, 1998.

8. Faculty advisor for newly formed Auto Body Technicians of America Club.

Professional Involvement

A. WAMBA: West Michigan Area Auto Body Association

B. Member of National Association of College Automotive Teachers, 1985 to Present.

C. Master Examiner of Michigan Occupational Competency Assessment Program, Auto Body. Member of test revision committee.

D. Evaluate Students practice teaching through the College of Education.

E. Seminar and Workshop Participation:

1. Vocational Industrial Clubs of America Program (VICA), July 1996.
2. National Association of College Automotive Teachers Seminar (NACAT), July 1990.
3. MOCAC Auto Body Repair Performance Examination, March 1984.
4. MOCAC Auto Body Repair Performance Examination, July 1983.
5. MOCAC Auto Body Repair Performance Examination, March 1983.
6. Vocational Industrial Clubs of America Program (VICA), May 1983
7. National Institute for Automotive Service Auto Body Task, November 1982.
8. MOCAC Auto Body Repair Performance Examination, July 1982.
9. MOCAC Auto Body Repair Performance Examination, March 1982.
10. Vocational Industrial Clubs of America Program (VICA) May 1982.
11. MOCAC Auto Body Repair Performance Examination, November 1981.
12. MOCAC Auto Body Repair Performance Examination, March 1981.
13. Vocational Industrial Clubs of America Program (VICA) May 1981.
14. Vocational Industrial Clubs of America Program (VICA) May 1980.
15. MOCAC Auto Body Repair Performance Examination, March 1980
16. Michigan Occupational Competency Assessment Center (MOCAC) Auto Body Repair Performance Examination, March 1979.

Professional Involvement Continued:

F. Certification / License

1. National Institute of Automotive Service Excellence (ASE)
   Master Collision Repair/Refinish Technician in the following areas:
   - Painting & Refinishing
   - Nonstructural Analysis & Damage Repair
   - Structural Analysis & Damage Repair
   - Mechanical & Electrical Components

2. I-CAR 2000 Collision Repair Certified

3. PPG Certified Refinish Technician

4. State of Michigan Automotive Unitized Body Repair Certificate / License

Innovative Educational Activities

The state has mandated a unibody certification test to be taken by all persons applying for certification. I teach the unibody repair procedures to my students in preparation for this test.

I include the updated materials that I receive from the various seminars I attend into my lectures and demonstrations. After attending the Vocational Instructors Program sponsored by PPG Industries, I was able to secure paint refinishing training notebooks for each student in the auto body program. I incorporate the materials covered in this notebook in my lectures.

I have also secured videos from the following companies to use in my lectures:

- Dozmor Company: Cage concept of automotive frame and unibody repair by use of lasers.
- Blackhawk Industries: Frame straightening with dedicated and universal measuring systems.
- ICAR: Unibody rail sectioning.

Professionals are invited to speak to students and demonstrate use of equipment and refinishing techniques:

- Blackhawk Industries: Frame and unibody repair techniques
- PPG: Refinishing
- Dupont: Refinishing
- State Farm Insurance Company: Computerized estimating

After attending the NACE Conference in December of 1994, I was able to acquire donations of two Miller 130 AMP Mig Welders for the students to use in the Auto Body Program at Ferris.

Publications

How To Restore Your Ford Pickup, by Tom Brownell, 1993.

The author tracked the process of restoration of a 1950 Ford pickup I restored at by home facility to include:

- Tool Selection
- Stripping and de-rusting
- Drive line overhauls
- Rebuilding brakes
- Metal repair and painting
- Replacing wiring, rubber, glass & interior

I supplies photographs and the step-by-step techniques to publish this book

VITA
Victor V. Fowler

EDUCATION: Associate Degree in Auto Body Repair
Washtenaw Community College
Ann Arbor, Michigan 1976

Bachelor Degree in Trade-Technical Teaching
Ferris State University, 1981

WORK EXPERIENCE: Auto Body Repairman 1975-1984

TEACHING EXPERIENCE: Assistant Professor
Ferris State University
1984 to Present

Temporary Technical Instructor
Ferris State University
Summer 1982-1983

Paraprofessional Instructor
Traverse Bay Area Vocational Center
January 1979 to June 1979

Recent Industrial Courses/Workshops:

- **Dupont Paint Seminar**
- **Sikkens Paint Seminar**
- **State Farm Insurance Estimating Seminar**
- **Unibody I-Car Seminar**
- **3-M Plastic Repair Seminar**
- **P.P.G. Paint Seminar**
- **General Motors Paint Matching and Tinting**
- **Spray Finishing Safety Seminar**
- **Acme Paint Workshop**
- **Martin Senior Paint Workshop**
- **Hunter 4-Wheel Alignment**

Industrial Courses Workshop

- **Automotive Service Excellence (A.S.E.) Certification. Structural, Non-Structural, and Refinishing, expires - July 2001**

- **Michigan Occupational Competency Assessment Center, Master Examiner for Auto Body Repair - 1994 through 2000.**

- **Vocational Instructors Seminar, Automotive Trades Divison 3-M Company - October 1988.**

- **Sikkens Paint, Instructor School - July 1987**

GOAL 1 **Recruiting**

An expanded recruiting plan will be implemented to provide an enrollment of at least 32 new students each fall.

MAJOR ACTIVITIES AND PROCESSES

- Technician of the Future Days.
- High school faculty technical update sessions.
- Visits by faculty to high schools and vocational centers.
- Expanded interaction with auto body associations.

EXPECTED OUTCOMES

- Increased enrollment.
- Increased retention.
- Additional graduates.

INDICATORS/SOURCES

- Increased productivity.
- Filled Quotas.
- Additional articulation with secondary programs.

REPORTING PROCESS

- Feedback will be shared with faculty, administration, and advisory committees.

RESOURCE REQUIREMENTS

	FTE	Salary	Adult Part-time	Student Wage	S & E	Equipment	Total
Internal reallocation							
One-time resource request							
Base funding Request					500		$500
Total					$500		$500

GOAL 2 **CURRICULUM**

Finish process of NATEF program certification.

MAJOR ACTIVITIES AND PROCESSES

- Go through NATEF certification process.

EXPECTED OUTCOMES

- Create more articulation agreements with high schools.

INDICATORS/SOURCES

- Actual agreements signed.
- Should help to steady enrollment because of articulation agreements.

REPORTING PROCESS

RESOURCE REQUIREMENTS

	FTE	Salary	Adult Part-time	Student Wage	S & E	Equipment	Total
Internal reallocation							
One-time resource request					500		$500
Base funding Request							
Total					$500		$500

GOAL 3 **STUDENT OUTCOME ASSESSMENT**

The educational outcomes of students completing the program will be assessed by a variety of acceptable methods.

MAJOR ACTIVITIES AND PROCESSES

EXPECTED OUTCOMES

INDICATORS/SOURCES

REPORTING PROCESS

RESOURCE REQUIREMENTS

	FTE	Salary	Adult Part-time	Student Wage	S & E	Equipment	Total
Internal reallocation							
One-time resource request							
Base funding Request							
Total							

GOAL 4 **Vocational Ed. Funding**

Vocational Ed. Funds will be requested to partially support equipment needs for the program.

MAJOR ACTIVITIES AND PROCESSES

- Computerized estimating system.
- Purchase updated equipment for Auto Body program.
- Chainless anchor adaptor for Korrack frame machines ($5,945).
- Hoist ($3,500).
- Increase base budget for subscriptions, renewals, computerized estimating ($1,000), and manuals ($500).

EXPECTED OUTCOMES

- Meeting industry standards in equipment and procedures.
- Provide necessary tools and equipment for student use.
- Increased industry acceptance of the program.

INDICATORS/SOURCES

- Increased enrollment
- Increased articulation.
- Graduate employment opportunities increased.

REPORTING PROCESS

- Feedback will be shared with faculty, administration and advisory committees.

RESOURCE REQUIREMENTS

- Feedback will be shared with faculty, administration, and advisory committees.

	FTE	Salary	Adult Part-time	Student Wage	S & E	Equipment	Total
Internal reallocation							
One-time resource request						$15,000	$15,000
Base funding Request					1,500		1,500
Total					$1,500	$15,000	$16,500

Auto Body Advisory List (Tab Form)

Last Name	First Name	Job Title	Organization Name	1st Add	City	State	Zipcode	Work Phone	Fax Number
Arndt	Steve	Representative	Finishmaster	4259 - 40th St. W.E.	Kentwood	MI	49512-		
Barron	Paul	Owner	Elite Auto Body	12663 Vergennes S.	Lowell	MI	49331-	(616) 897-6464	
Berlien	David	President	Automotive Technical	12700 Gurd Road	Dellon	MI	49046-	(616) 671-5038	
Boboltz	Dan		Single Source Inc.	1351 Comberere	Troy	MI	48083-		
Davis	Kenneth	National OEM Acco	PPG Industries	5875 New King Court	Troy	MI	48807-	(313) 641-2235	
Innes	Scott		Finishmaster	2155 West M-21	Owosso	MI	48867-	(517) 723-8296	
Irvine	Bill	Territory Manager	PPG Industries	5892 Dover Lane	Traverse C	MI	49684-	(616) 943-9142	
Jones	Mike	Claims Representa	AAA						(616) 739-8856
Konziolka	Mike	Owner	M&M Collision Center	1015 Maple Street	Big Rapids	MI	49307-	(616) 796-3020	
McGorman	Mike	Owner	M&M Collision Center	1015 Maple Street	Big Rapids	MI	49307-	(616) 796-3020	
Newman	Rob	Sales & Tech. Sup	Ken Root Sales Forc	928 Riverside Drive	Lowell	MI	49331-	(616) 896-9347	(616) 896-9347
Orlando	Jerry	Owner/President	J & L Collision Inc.	25825 Gratiot Ave.	Roseville	MI	48066-		
Portor	Daryl	Paint Platform Serv	Chrysler Motors	2301 Featherstone R	Auburn Hill	MI	48326-	(248) 512-7878	(248) 512-7906
Roon	Paul	Shop Manager	G.I. Body Shop						
Shaffer	Jeff	Collision Manager	Pfeiffer Collision Cent	2430 - 29th St., S.E.	Grand Rapi	MI	49518-		
Smith	Tom	Claim Specialist	State Farm Insurance	4032 Highway M-139	St. Joseph	MI	49085-		
Taylor	Scott	Owner	Scott's Body Shop	10811 Northland Driv	Big Rapids	MI	49307-	(616) 796-6006	
Walldorff	Mark	Claim Specialist	State Farm Insurance	2660 Leonard	Grand Rapi	MI	49501-	(616) 940-2443	

FERRIS STATE UNIVERSITY

AGENDA
AUTOMOTIVE SERVICE TECHNOLOGY
ADVISORY COMMITTEE MEETING APRIL 24, 1997

9:30 A.M. Coffee and Rolls - Automotive Center Room 102

10:00 A.M. Student Meeting (students and advisory committee only)

12:00 Noon Lunch - Centennial Dining Room, Rankin Center
Welcome - Dean Mark A. Curtis, College of Technology

1:15 P.M. General Meeting - Automotive Center Room 102

1. Enrollment and Placement
2. Recruiting

Discussion Topics:

1. Reaction to student meeting - advisory committee members.

2. Ron Tuuri:
   A. NATEF/ASE status and requirements
   B. Needs of employers -- entry level technicians

3. Chuck Bonning:
   A. Facility useage.
   B. Advisory committee ideas for room useage of the Parts Crib if vacated.

4. Bill Routley:
   A. Tools and equipment - recent purchases and future needs.

2:15 P.M. Break

5. Bill Wagner:
   A. Engine Performance class.
   B. Auto Service curriculum and changes.

6. Greg Key:
   A. Building maintenance projects.
   B. Program review.

7. Jack Richards:
   A. Articulation agreements.

4:00 P.M. Adjourn.

COLLEGE OF TECHNOLOGY
AUTOMOTIVE CENTER
708 Campus Drive, Big Rapids, MI 49307-2281
Phone 616 592-2981 Fax 616 592-2982

1997 AUTOMOTIVE SERVICE ADVISORY COMMITTEE
APRIL 24, 1997

Will attend

Joseph C. Barney, Jr.
8181 E. Nine Mile Road
Big Rapids, MI 49307
Term: 1995-96-97

yes

Ken Betz
Test Development Engineer
Chrysler Motors
c/o 13959 Rike Road
Chelsea, MI 48118
Term: 1995-96-97

yes

Alex Bilinski, Manager
Technical Services
Pontiac Motor Division, GMC
One Pontiac Plaza
Pontiac, MI 48035
(810) 857-1566
Term: 1997-98-99

yes

Patrick Kelly
Department of Transportation
51885 Grape Road
Granger, IN 46530
(219) 272-3649 home
(219) 674-8836 work
Term: 1995-96-97

yes

Joe Kummer
Resident Engineer
Chrysler Corporation
Mound Road Plant
Term: 1997-98-99 (will replace Ken Betz)

No

Wade Messing
8850 Allen Road
Fowlerville, MI 48836
Term: 1997-98-99

yes

Robert Tenbusch, Supervisor of Development
Lakes Technical Center
General Motors Corporation
4100 S. Saginaw
Flint, MI 48557-03
Term: 1996-97-98

yes

Don Walcheski
Quality Car & Truck Repair
530 West Avenue
Big Rapids, MI 49307
Term: 1995-96-97

97list.doc

Appendix F

EVALUATION PLAN FORMAT

Program: Automotive Body Technology

Degrees Awarded by Program: Associate in Applied Science Degree

Program Review Panel:

Chair: Greg Key, Professor/Coordinator
Acting Dean: Jack Richards
Program Faculty: James Bigelow, Assistant Professor
Victor Fowler, Assistant Professor
Gary Edgerly, Technical Instructor
Advisory Committee Member: Mike McGorman
Faculty Outside College of Technology: Tom Brownell, Professor

Purpose:

To conduct a study of the Automotive Body Technology program to evaluate its needs and effectiveness, so the university can make an informed decision about the program.

Data Collection Techniques and Information Resources:

A. Because of low returns from the College of Technology Graduate Survey we will have to develop our own.

B. Employer Survey: Will survey our employers.

C. Student Evaluation: Will be done in the fall of 1998 using a survey.

D. Faculty Perceptions of the Program: Will be done by a questionnaire in the fall of 1998.

E. Advisory Committee Perceptions of the Program: Will be done by a questionnaire to the Advisory Committee Members during the winter of 1999.

F. Labor Market Analysis: Will use MOIS and West Michigan Automotive Body Association.

G. Evaluation of Facilities and Equipment: Will be done by reviewing the Automotive Center equipment and the library and computer resources.

H. Curriculum Evaluation: Will be done with a survey by the Automotive Body Technology Curriculum Committee.

Appendix F (Continued)

Schedule of Events:

Activity	Leader	Target Dates
Graduate Follow Up Survey	James Bigelow	December 15, 1998
Employer Follow Up Survey	Gary Edgerly	January 15, 1998
Student Evaluation of Instruction	Victor Fowler	November 15, 1998
Faculty Perceptions	All	November 15, 1998
Advisory Committee Perceptions	Victor Fowler	January 14, 1998
Labor Market Demand Analysis	Greg Key	January 15, 1998
Evaluation of Facilities & Equipment	Greg Key	December 15, 1998
Curriculum Review	James Bigelow	January 15, 1998

_____

Signature of the Chair, PRP

TRANSPORTATION & ELECTRONICS DEPARTMENT
MEMORANDUM

TO: Doug Haneline, Chair, Academic Program Review Council

FROM: Greg Key, Professor & Jack Richard, Acting Dean
Transportation & Electronics Department

SUGJ: Proposed Budget for the Automotive Body Technology Program Review

DATE: November 19, 1998

We are submitting this proposed budget for the Automotive Body Technology program review.

Student, advisory committee and faculty surveys	$215
Printing, copying and mailing costs	$225
Student Wages (30 hrs @ $5.50 per hr.)	$165
Final document production	$150
Total	$755

DEPARTMENT OF LANGUAGES AND LITERATURE
FERRIS STATE UNIVERSITY
Big Rapids, Michigan 49307

To: Program Review Panel Chairs

From: Doug Haneline, APRC Chair

Subject: Plan, Panel, Budget Documents for Program Review

Date: January 20, 1999

The Academic Program Review Council has approved your program evaluation plan and your study panel. The Office of Academic Affairs has approved your proposed budget. To arrange for the transfer of funds into your department's account, please call Linda Golden at X3857.

Fourteen copies of the panel report are due Tuesday, September 14, 1999. The copies should come directly to me. During September, October, and November 1999 APRC will meet to review each program. During that time we will want to meet with the panel to discuss the report.

cc: Tom Oldfield, Academic Affairs

Greg Kay – Automotive Body Technology

APPENDIX A

PROGRAM PROFILE

Program: Automotive Body Technology
Department: Transportation and Electronics
College: Technology

I. Purpose of the program:

A. Describe the goals and objectives of the Program (Refer to the role and mission statement of the program):

The mission of the Automotive Body Technology program is to prepare students for employment in the Auto Body repair field and to be participative members of society.

Goals:
To provide students in the Automotive Body Technology program the necessary skills that will enable them to be successful automotive body repair technicians.

To provide educational opportunities to non-traditional students equivalent to that offered to traditional students.

To provide advisement and counseling to the students to help them achieve their career goals.

To maintain a high level of faculty expertise through faculty development seminars and training sessions.

To maintain close relationships with the auto body industry to verify curriculum and enhance graduate placement opportunities.

Outcomes:
Graduates of the Automotive Body Technology program will continue to be in high demand by industry.

Enrollment in the Automotive Body Technology program will continue to grow so that the program quotas will continue to be full.

Graduates of the Automotive Body Technology program will have the skills for employment in the automotive body industry.

Graduates of the Automotive Body Technology program will be educationally prepared to continue their education if they desire.

The Automotive Body Technology program will continue to be a national leader in the preparation of technicians and managers for the automotive body repair industry.

The Automotive Body Technology program will continue to enhance its position as a model and a resource for other programs of this type.

B. How is the program compatible with the role and mission statement of FSU?

The mission of the Automotive Body Technology program is to prepare students for employment in the Auto Body repair field and to be participate members of society.

The program is very compatible with the role and mission of the University. The program allows for student to go to work into the industry and affords the opportunity to go on to a 4 year degree at FSU.

C. How is the program integrated/coordinated with other programs at FSU?

The mission of the College of Technology is to educate students in a spectrum of technical programs critical to Michigan's economic future and to provide technical support to business and industry through the Technology Transfer Center (TTC). This curricula spectrum of engineering, engineering technology, technology management, and technical specialty programming integrates the appropriate general education courses needed to prepare today's graduates with a foundation of knowledge required to cope with advancing technology within their professional careers.

The College of Technology is committed to providing its diverse student body with strong technical curricula emphasizing practical, usable skills that prepare the graduate to analyze, synthesize and problem-solve within their discipline. This is accomplished in an environment, which is one of respect for our students and their field of study. Students are perceived as being customers who have enrolled in programs to become employable and prepared for advancement in their chosen careers after graduation.

The college takes this trust seriously, and provides curriculum laddering options for two-year A.A.S. degree program graduates to transfer into four-year B.S. degree programs.

Goals:

1) Provide A.A.S. and B.S. graduates the skills and knowledge to be employable and advance within their field of study and improve their educational options after graduation.

2) Develop a sense of professionalism within the student by encouraging professional student association activities within the student's chosen field of study.

3) Provide applied research for business and industry and faculty development projects via Technology Transfer Center (TTC) activities. Such activities would include training, product development, manufacturing process improvement, and prototype development.

Purpose:

1) Follow-up studies of graduates one year, three years, five years, and eight years after graduation will measure graduates' employment and educational achievements.

2) Student membership in disciple-related student professional associations will be expanded through industry sponsorship and student/faculty involvement.

D. **How is the program integrated/coordinated with other programs at other institutions?**

Our program is an associate degree program. All general education requirements for our program are supplied by many other departments such as math, English, etc. Having an associate degree allows for transfer students from other colleges to receive credit both in general education and the major program area. The auto body program is set up as the first two years of the automotive and heavy equipment management bachelor degree. This allows other colleges to transfer students strait into the Bachelor program.

E. **How does the program serve society at the community, state, nation, and world?**

History:
The Automotive Body Technology program started in a wing of the Trade and Industrial Center on the Ferris State University campus. When the program began, it occupied approximately 10,600 sq. ft. There was 1 faculty member and 20 students. The Automotive Body Technology Program was the parent program for all other programs in the Transportation and Electronics Department.

Facilities:
Presently the Automotive Body Technology program occupied approximately 57,000-sq. ft. in the Automotive Center building. This facility had a major remodel in 1988 to better accommodate the automotive programs.

One of the major features of the Automotive Body Technology program at Ferris State University is its large lab areas. This 13,300-sq. ft. service shop is designed to operate much like a dealership service department.

Service customers mainly provide the vehicles that are worked on in this shop and the work is done by automotive students and supervised by the faculty.

Staff:
The Automotive Body Technology program has a staff of three full-time faculty members, all with extensive industry background and teaching experience. All of the faculty have baccalaureate degrees. In addition, each faculty member receives 20 to 40 hours of additional technical training each year.

Students:
There are approximately 50 full-time students in the Automotive Body Technology program at any time in the normal school year. Students can enter the program fall terms. The majority of the students come from Michigan but there are students from several other states and even from other countries.

Education:
The education that is provided in the Automotive Body Technology program is representative of the high technology level that is demanded by the automotive body industry. The students are trained in the use of the latest diagnostic equipment and repair

tools. They are instructed in the fundamental skills that are needed to use the high technology equipment. They receive both theory education and hands-on application. The Automotive Body Technology program is constantly being upgraded to meet the needs of industry both in the areas of education and equipment. Other divisions of Ferris State University provide the important elements of the student's education such as mathematics and English. The Automotive Body Technology program has a dynamic and highly qualified advisory committee, which provides input on an ongoing basis concerning the operation of the program.

Job Opportunities:
There is a very high demand for graduates of the Automotive Body Technology program. Most of the students have several job offers on completion of the program.

The typical job for a graduate would be performing repairs on late model automobiles in a medium to large dealership or major repair facility. The pay is excellent, with starting salaries in the $20,000 to $26,000 range and there is room for advancement. Many of the graduates of the Automotive Body Technology program elect to continue their education and pursue a Baccalaureate degree in Automotive and Heavy Equipment Management, Teacher Education or Small Business Management.

Scholarships:

Budget and Revenue:
The general fund operating (S & E) budget for the program has continued to ~~decrease~~ INCREASE over the past five years. We have been fortunate to obtain major donations of vehicles, training materials, equipment and cash from grants and alumni and various other sources. These donations enable us to continue to operate one of the most highly respected post-secondary automotive body programs in the nation. The Automotive Body Technology program service floor operation also brings in additional funds we use to help operate the program.

II. Resources of the program:

The majority of our resources come from industry except for our salaries.

A. Personnel:

1. Faculty: List by rank with degrees (including year, field of study, and institution), certificates, and/or related work experience.

   a) Tenure-Track - 3 Automotive Body Faculty:

   (1) James A. Bigelow, Assistant Professor

   (2) Gary L. Edgerly, Technical Instructor

   (3) Victor V. Fowler, Assistant Professor

VITAE for each faculty member see Attachment A.

b) **Adjunct** - None

c) **Temporary** - None

2. FTE overload

3. Off-campus programs: location and involvement of faculty. None

4. Administration: degrees including year, field of study, and institution, certificates, and/or related work experience.

   One Department Head:

   L. Jack Richards, Professor Acting Department Head Bachelor of Science Degree, Trade Technical Education, FSU 1972.

   Leadership Development Program, School of Education, University of Michigan, 1974.

   Master of Science Degree, Occupational Education and Administration, University of Michigan 1977.

   See resume for L. Jack Richards Attachment B.

5. Support staff (clerical, technical, ...)
   2 Account Clerks, 1 Equipment Repair Technician
   Support 3 Programs, 310 Students & 1 building

6. Student Assistants.
   4 student workers

7. Advisory Committee: Names, affiliations, and positions of the membership.
   See Attachment C.

B. Instructional resources:

1. Describe, in general, the facilities (classroom, lab, clinic, etc.) and equipment available to the program.

The Automotive Center houses 10 Automotive Service Labs and six Automotive Classrooms, a Service Floor, Parts Crib, Parts Storage, Equipment Repair Room, Administrative Offices, a Manual Reference and Video Room, Automotive and Heavy Equipment Management Offices as well as the Auto Body Labs. See Attachment D.

2. Supplies and expense budget. Approximately 8K - 10K

3. Equipment acquisition budget.
0 for # of years

This year

Academic Program Review
Funded Recommendations

FY	Type	College	Department	Activity	FTE	Amount
99	Base	A&S	Mathmatics	Program Coordinator	~~1.0~~ .25	$2,200
99	Base	AHS	Nursing	Sup Fac		$12,000
99	Base	BUS	Real Estate	Advisory Board/Internships		$700
99	Base	BUS	General Bus	Advisory Board		$200
99	Base	TECH	Mech. Eng.	Tenure Track	1.0	$49,000
99	One-time	EDU	Recreation Leadership	External Accred.		$12,000
99	One-time	AHS	Dental ~~Tech~~ Hygiene	Prof Development		$4,000
99	One-time	TECH	Tech Drafting	Prof Development		$2,000
99	One-time	A&S	Biology	Equipment		$10,000
98	One-time	TECH	Welding			$20,000
98	Base	BUS	Ins/Real Estate	Student Rec/Fac Dev		$3,000
98	Base	BUS	PGM	Fac & Prog Development		$2,000
98	Base	BUS	PGM	Clerical	1.0	$39,500
98	One-time	AHS	Nuc Med/Resp/Rad	Computers-- comm w/clinicals		$16,200
98	Base	TECH	Auto Service	faculty dev/Industry Relations		$9,000
98	One-time	TECH	Auto Service	faculty dev/Industry Relations		$3,000
98	Base	TECH	Printing Mgmt	student Rec/Prog&Fac Dev		$5,000
98	Base	BUS	PTM	student Rec/Prog&Fac Dev		$2,000
98	Base	TECH	Plastics	Assess/Prog&Fac Dev		$3,000
98	base	TECH	Plastics	Tenure Track	1.0	$67,500
98	One-time	EDU	Teacher Ed	Tenure Track	1.0	$16,500
98	Base	EDU	Teacher Ed	std rec/prog&fac dev		$3,000
98	Base	BUS	Quality & Prod Mgmt	Library Resources		$1,000
98	Base	TECH	Welding	Prog&Fac Dev		$6,000
						$288,800

A

Minutes
Automotive Service and Auto Body Program Meeting
November 19, 1996

The meeting opened at 11:00 a.m. Jack Richards read a note concerning a counselor from Oxford High School who called asking for an automotive instructor to call on them. John Gahrs said he has already made travel arrangements to go to Oxford High School on December 11th. Jack also talked about Power Point and the need for a projector and lap top computer. He said my suggestion before we spend - why don't we buy a PC and put it on a cart and do some developmental things on that before we buy a lap top. He said AHM is considering buying a lap top - EDS gave us money designated for computer equipment.

Greg Key said we have a number of committees set up and they are functioning very well. He has set up a format for the meetings as follows.

I. Approval of the past meeting's minutes.
II. New Business
III. Announcements
IV. Committee Reports
V. Old Business
VI. Open Forum (anyone who wishes to address a topic that did not get on the agenda)
VII. Adjournment

(1) Greg said he would like to have a meeting scheduled once a month or as needed.
(2) The Scheduling Committee will be chaired by Greg Key and will have four faculty - 3 corporate and one comprehensive program person. Scheduling should be opened up to everyone. Chrysler involves 25% more course offerings and becomes more difficult to schedule.
(3) Mark Curtis has no problem on opening up the budget for all faculty to look at.
(4) All committees will be developed by the faculty and faculty will essentially be writing the agenda for the program meetings.
(5) Need to schedule an advisory committee meeting for the Chrysler program.

(6) Greg Key said that he is chairing the Program Review for the Auto Service Program. The document is lengthy and is on the computer and should be printed out and merged onto one disc within a week or two. The Board is looking at the program review process very seriously. Most of the document looks incredibly good as Bill Wagner pointed out. We are the second highest cost program in the College of Technology according to the Program Teaching Cost Book which has many mistakes in it, and will not be used.. (They are looking mainly at faculty salaries re: high cost.) Ford starts new students every other year so that may be a way of explaining higher enrollments for those years. We have a decline in enrollment since 90-91 according to the Ferris Fact Book. For program review we will use the last five years enrollment figures. We will have to justify the reason for the decline. We have one of the highest retention rates in the university -- 63% graduate from Auto Service. Auto Body is also high. Hopefully the Ford and Chrysler programs will increase enrollments next year.

Greg has just completed writing a two page Auto Service Statement for the program review giving such facts as it is the largest feeder to the AHM program, and the largest program in terms of students and faculty in the department.

(7) Chrysler training is December 10, 11, 12 and 13. Bill Routley said the first two weeks of December Ford is going to be doing training in the ASSET room -- if anyone would like to sign up let him know.

(8) Part Time Adult for Jeff. -- Jeff said he feels students are not responsible. He cannot watch them 8 hours a day. It was suggested that a driver's license and/or student I.D. card be left when checking anything out of the manual room. Greg said it may be the same cost to hire a part time adult for the Manual Room.

(9) Committee Reports: Bill Routley reported that the Equipment Needs faculty submitted last April were not a voc ed list -- it was for the Unit Action Plans. Bill said if we wait on the lap top and the projector we will have $27,428. Chuck Bonning said he will withdraw a computer for the service floor ....that puts us at $24,000. Ron Tuuri said when he was at NATEF last week he received a donation of a new Snap-on Tester. Ron said he had some items submitted in April and he would like to resubmit them.

Jim Norrington said he would like to make arrangements with Ken Fenske to look at a Scope. He said we need updated scopes for class and the service floor students to use. He said he would like to set up a date and time for those people who are interested in looking at it during examination week. Jim said this is a $4,000 scope plus accessories.. With taking out the lap top there should be enough money to purchase the scope and analyzer. Jim Norrington said he will have Ken Fenske show us the scope on **Monday afternoon, December 9 at 1:00 p.m.**

Bill Routley said Anita is going on vacation for three weeks and she needs to get the P.O.s typed before she leaves.

Pete Alley said the issue of a brake lathe needs to be resolved. The brake lathe was purchased in 1955 and it is rebuildable. If we buy a new one, what will we do with the one that is left. Chuck said it seems to me the new machine should go on the service floor because we are repairing customer cars.

(10) Chuck Bonning said the Power Point presentation is **Thursday, November 21, and has since been cancelled.**

The meeting adjourned at 12:00 noon.

Toyota expands tech training program

LENA SAWYERS
Staff Reporter

Toyota Motors Sales U.S.A. Inc. has expanded its Toyota Technical Education Network.

The program, which was established to train mechanical service technicians, will start this fall training body-shop technicians and parts and service professionals.

Toyota began its Technical Education Network, known as T-Ten, 13 years ago when it joined forces with technical schools and community colleges to help recruit, train and find jobs for mechanical service technicians.

55 SCHOOLS INVOLVED

Toyota currently has partnerships with 55 schools. The program has been expanded at six of those schools to include body shop and parts and service training.

In addition to mechanical technician training, three schools also offer two-year courses in collision repair and refinishing, and three offer one-year training for parts department employees and assistant service managers.

Offering parts and service professional training are: Columbia Greene in Hudson, N.Y.; Shore Line Community College in Seattle; and St. Cloud Technical College in St. Cloud, Minn.

Collision training is available at Rankin Technical College, St. Louis; Miami Lakes Technical Education Center, Miami Lakes, Fla.; and Cypress College, Cypress, Calif.

Toyota tested the training during the 1997-98 school year and expects to graduate two students — trained as assistant service managers — at the end of September. At the end of 1997, the Technical Education Network had trained about 2,600 mechanical service technicians.

"We feel good about the success of the mechanical T-Ten program; we don't see why we can't branch out and use that same formula in other areas," said Roger Foss, Toyota national dealer support and body-shop manager.

Toyota spent the 1997-98 school year identifying which schools would be most appropriate for the expanded program, evaluating the schools' facilities and equipment and helping to develop a curriculum, said Rick Lester, manager of the Technical Education Network.

JOINT EFFORT

Under the Technical Training Network, Toyota provides the schools with scholarships, instructor training, vehicles and uniforms. Participating dealers offer hands-on internships in their service departments.

Foss said many vendor companies — such as those that make paint, body and frame machines and computers — donated money, equipment or both to upgrade the schools' facilities to handle the expanded training.

Foss said the Technical Training Network is good for dealers because the students who graduate are factory-trained and ready to go to work.

"Every year, we sell 1.2 million new vehicles; dealers are challenged to have the capacity to service those vehicles," Foss said. AN

Asian economic crisis hauls down Japan's July exports

JAMES B. TREECE
Staff Reporter

TOKYO — Japan's vehicle exports in July fell 5.8 percent from a year earlier to 403,732.

For the third month in a row, collapsing exports to Asia pulled down overall exports.

The growth in exports to markets other than Asia slowed, moreover, with only shipments to the Mideast rising at a double-digit clip.

The economic crisis in Asia slashed exports to that market for the 10th straight month. Exports to Asia tumbled 64.1 percent from a year earlier to 22,846.

Shipments to the United States also fell. The 4.6 percent drop, to 120,201 units, was led by a 28.6 percent decline in North America-bound exports by Nissan Motor Co.

Mazda Motor Corp.'s exports to North America fell a sharp 3 percent.

Europe again topped the United States as an outlet for Japanese exports. Shipments to Europe rose 5.3 percent to 126,394.

Mazda, Suzuki Motor Co. and Fuji Heavy Industries Ltd. were the only carmakers to post higher exports in July. Mazda's exports jumped 20 percent as it ramped up shipments to Europe of the Demio and the new 626 and Protege/Familia.

Suzuki's exports surged 26 percent from an unusually weak year earlier period. Fuji Heavy's exports of Subarus edged up 0.7 percent on continued strong demand for its Forester in North America.

On the other hand, Mitsubishi Motors Corp.'s exports slumped 16.7 percent. Shipments to the United States rose 16.0 percent but exports to Europe fell 45 percent. AN

Down again

July exports for selected companies: Percentage change from July 1997

	To N. America	To Europe	Total
Toyota	-13.3	-19.5	-6.8
Nissan	-28.6	76.6	-3.1

Memorandum

Date: 10/26/98

To: Janice Webster, Environmental/Clinical Sciences

Jim Hoerter, Biology

Nancy Cooley, Education

John Valas, Management

Clyde Hardman, Accountancy/CIS

Stuart Travis, Marketing

Phil Marcotte, Transportation and Electronics

Chuck Matrosic, Construction and Facilities

John Thorp, Social Sciences

CC: Isabel Barnes, Dean, Allied Health Sciences

Sue Hammersmith, Dean, Arts and Sciences

Joe Rallo, Dean, Business

Jack Richards, Interim Dean, Technology

Tom Oldfield, Assistant Vice President for Academic Affairs

Greg Key, President, Academic Senate

From: Doug Haneline, APRC Chair Doug

Subject: Program Reviews for 1998-1999

The Program Review Cycle 1998-2005 indicates that one or more reviews are scheduled in your department (see attachment). As perhaps you note from the document, some programs are linked into a single review on the basis of curricular or other similarity.

Because the APRC Calendar calls for the submission of Program Review Panel reports by Tuesday, September 14, 1999, I am writing to you now so that you can begin to organize the panels that will conduct the self-studies.

Between now and February 1, 1999, four tasks need to be accomplished.

(1) A Program Review Panel Chair must be appointed by *December 1*. The Chair of APRC makes this appointment with the advice of the faculty and department head in the area.

(2) By *December 7*, a Program Review Panel must be formed. The appointments should follow the guidelines on page four of the Guide for Participants.

(3) The panel must prepare an evaluation plan according to the guidelines on page five of the Guide for Participants.

(4) Accompanying the plan should be a budget, prepared according to guidelines on page five of the Guide for Participants.

By December 15, please send me three documents: the names of the panel members, the self-study plan, and the budget. I recognize that this may crowd your schedule, but the sooner I receive your documents the sooner APRC can approve them and you can get to work.

The 1999-2000 calendar calls for the approval of evaluation plans and budgets no later than February 1, 1999. At this point the panels can get to work on collecting information, making evaluations, and writing the report. Panels may wish to get started earlier, and APRC will review and approve documents as soon as they are received.

In the near future, I want to meet with program representatives in each department. At these meetings we can discuss your questions about the process, the documents, and the timeline. I will contact you soon to arrange a meeting at a mutually convenient time.

I look forward to beginning a productive review cycle.

ACADEMIC AFFAIRS

Program Review Cycle

1998-2005

1998-99

1. Technical And Professional Communication (B.S.)
2. Finance (B.S.) and Accountancy/Finance (B.S.)
3. Accountancy Programs (B.S. and M.S.)
4. Management (B.S.)
5. Information Systems Management (M.S.)
6. Visual Communications (A.A.S. and B.S.)
7. Optometry (O.D.) and Visual Science (B.S.)
8. Television Production (B.S.)
9. Heavy Equipment Technology (A.A.S.) and Heavy Equipment Service Engineering Technology (B.S.)
10. Construction Management (B.S.), Building Construction Technology (A.A.S.) and Civil Engineering Technology (A.A.S.)
11. Manufacturing Engineering Technology (B.S.) and Manufacturing Tooling Technology (A.A.S.)
12. Biotechnology (B.S.)
13. Radiography (A.A.S.) program review as required by 1996-97 APRC review recommendation.
14. Insurance (B.S.) and Insurance/Real Estate (B.S.) progress report due on March 15, 1999 as required by 1996-97 APRC review recommendation.
15. General Business (A.A.S.) due on March 15, 1999 as required by the 1997-98 APRC review recommendation.
16. Industrial and Environmental Health Management (B.S.) progress report due on March 15, 1999 as required by 1997-98 APRC review recommendation.
17. Real Estate (A.A.S.) progress report due on March 15, 1999 as required by 1997-98 APRC review recommendation.

1999-00

1. Medical Laboratory Technology and Medical Technology (A.A.S. and B.S.)
2. Ornamental Horticulture Technology (A.A.S.)
3. Child Development (A.A.S.)
4. Human Resource Management (B.S.)
5. Operations Management (B.S.)
6. Management/CIS (B.S.) and Computer Information Systems (B.S.)
7. Marketing/Sales (B.S.)
8. Automotive Body (A.A.S.)
9. Facilities Management (B.S.) and Architectural Technology (A.A.S.)
10. Public Administration (B.S.)
11. Printing Management (B.S.) and Printing Technology (A.A.S.) progress report on enrollment is due on October 1, 1999 as required by the 1996-97 APRC review recommendations.
12. Advertising (B.S.) program report is due March 13, 2000 as required by the 1997-98 APRC review recommendations.

2000-01

1. Health Care Systems Administration (B.S.), Health Information Management (B.S.) and Health Information Technology (A.A.S.)
2. Nursing (A.A.S.)