Major Highlights

Program Dashboard

Program Dashboard – Percent of Targets Achieved

Credit Hour Trends

Degree Trends

Occupational Projections

Occupational Skills Analysis

Program Assessment Plan

Program Assessment Results

CRC Recommendations

CRC Follow-Up

Automobile Servicing Major Highlights March 2008

Overview

The information presented in this binder represents supporting reports and data associated with the CRC's review of the Automobile Servicing program. These documents are intended to provide a historical perspective, as well as an idea of current strengths and future challenges facing the program which may impact short and long term curriculum development.

Major Highlights

- Over the last four years the composite program dashboard score has declined, dropping from 10.08 to 9.69 in 2006-07. This trend should be interpreted as an early warning of potential challenges facing the program. Yet in 2006-07, the ATA curriculum still ranked 30th out of 99 curriculum tracked in the Program Dashboard.
- Although the composite dashboard score has declined over the past four years, none of the
 established benchmarks fell into the trouble (red) zone during 2006-07. Importantly, three of
 the seven dashboard measure exceeded their established benchmarks, which included the
 sections filled to capacity, the percent of minority students, and the student course
 completion rate.
- While the percent of sections filled to capacity has steadily increased over the last four years, the number of canceled sections has steadily increased. During 2006-07, 79% of offered ATA sections were completed, while college-wide 91% of offered sections are completed.
- The percent of minority students has remained fairly consistent for the past four years and most recently was at 25% in 2006-07. Despite this percent falling below the college-wide 28%, it still exceeded the target score of 18.8%. In addition, the student course completion rate has fluctuated in this time period and remained above the college-wide average in 2006-07, 78% compared to approximately 68%.
- Enrollment trends indicate that after a ten-year low of 888 credit hours in 1997-98, there was an upward trend in enrollment starting in 2000-01 and reached 2,440 in 2003-04. From this time forward, the number of credit hours has remained steady. In addition, during 2006-07, ATA courses ranked 40th in credit hour generation among all curriculum at the college.
- Over the last ten years, there's been an average of approximately 3 Certificates and 5 Associate Degrees awarded per year. It is worth mentioning that in 2005-06, there was an unusual spike of Certificates awarded with a total of 11. Between 1997-98 and 2006-07 a total of 28 Certificates and 52 Associate Degrees have been awarded in the program.

- Two occupations were identified which pertain to the Automobile Servicing program. These
 include Automotive Service Technician/Mechanics and also Bus/Truck Mechanics, Diesel
 Engine Special. According to CCbenefits Inc., there were approximately 10,400 Automotive
 Service Technicians and Mechanics in the four-county region of southeast Michigan in 2007
 and 1,100 new and replacement jobs in this occupation are projected in the next five years.
 Showing a smaller number of new and replacement jobs, yet still growth, is the occupation
 involving bus and truck mechanics. In 2007, there were 3,570 jobs and the projected
 addition of 282 jobs for 2012.
- In terms of program assessment, the Automobile Servicing assessment plan has nine unique Learning Outcomes and has a total of eleven Benchmarks, which is in accordance with the guidelines established by the Student Outcomes Assessment Committee.
- However, between February 2007 and February 2008, there was no indication that assessment had taken place with these eleven benchmarks.

Oakland Community College Program Dashboard

The purpose of the program dashboard is to provide a data driven tool designed for the objective review of all curriculum offerings. Based on a common set of measures which apply to all programs/disciplines the dashboard facilitates the systematic identification of well performing as well as ailing curriculum so early intervention efforts can be undertaken.

In a rapidly changing economic and competitive environment it is necessary if not imperative to continually review curriculum offerings annually. Dashboard reports are a useful tool for monitoring program performance. In addition, they allow for an integrated approach for collecting, presenting, and monitoring data to meet long and short-term programmatic decision-making needs.

The Program Dashboard is based on seven measures which include:

- Sections Filled to Capacity
- Percent of Completed Sections
- Credit Hour Trend Ratio
- Percent of Minority Students
- Percent of Withdrawals
- Percent of Incompletes
- Student Course Completion Rate

The following report provides summative information for the most recent academic year as well as detailed trend data on each measure over the past several years.

Program Dashboard Detail Report

PrefixATATitleAutomobile Servicing

	Program				College Wide
	2006-07	2005-06	2004-05	2003-04	2006-07
Sections Filled to Capacity	91.3%	86.7%	85.8%	84.1%	84.4%
Percent of Completed Sections	79.4%	88.6%	92.7%	94.1%	90.7%
Headcount Trend Ratio	0.95	1.05	1.15	1.38	1.01
Credit Hour Trend Ratio	0.95	1.05	1.15	1.38	1.01
Percent of Minority Students	25.1%	25.4%	21.9%	26.3%	28.2%
Percent of Withdrawals	8.0%	6.8%	6.7%	6.1%	18.3%
Percent of Incompletes	2.5%	3.7%	1.2%	1.4%	1.5%
Student Course Completion Rate	78.2%	73.1%	79.1%	71.5%	67.7%
Dashboard Score	9.69	9.7	9.94	10.08	

Prefix ATA

Prefix Title Automobile Servicing

	2006-07	2005-06	2004-05	2003-04
Total Students	616	679	695	717
Total Capacity	675	783	810	853
Sections Filled To Capacity	91.3%	86.7%	85.8%	84.1%

Definition:

The percent of all available seats which are filled on the terms official census date. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: One-tenth-day of each term.

Methodology:

Total number of sections (credit courses only) that are filled to their designated capacity e.g. allocated seats divided by the total number of available seats in all sections throughout the academic year (July 1 through June 30). In other words, how many sections are filled to their capacity on the sections 1/10 day out of all sections? Include sections that are more than filled / overflowing in calculation.

One-Tenth Day data shows the capacity filled numbers at approximately 3 weeks after the Fall and Winter terms begin; and 1 week after the Summer I and II terms begin. This data will not provide additional enrollment data if the sections begin after the one-tenth day.

While a section may only have a few students enrolled in it the college is able to designate some sections as 'full' so that they are not cancelled (per OCCFA Master Agreement). Therefore some disciplines may show low fill capacity rates, and the college never cancelled the sections or condense the students into fewer sections offering the same course.

Percent of Completed Sections

Prefix ATA

Prefix Title Automobile Servicing

	2006-07	2005-06	2004-05	2003-04
Active Sections	27	31	38	32
Cancelled Sections	7	4	3	2
Total Sections	34	35	41	34
Percent of Completed Sections	79.4%	88.6%	92.7%	94.1%

Definition:

Of all offered sections, the percent of sections that are completed (not cancelled). Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: End of session, after grades are posted.

Methodology:

Annually, the total number of offered credit sections that are completed. Formula = number of completed credit sections divided by the total number of offered credit sections. In other words, the percent of these sections that are not cancelled.

Headcount Trend Ratio

Prefix	ATA					
Prefix Title	Automobile Se	ervicing				
		2006-07	2005-06	2004-05	2003-04	
Headcount Y	(ear 1	717	586	460	229	
Headcount Y	(ear 2	724	717	586	460	
Headcount Y	(ear 3	679	724	717	586	
Headcount Y	(ear 4	619	679	724	717	
Headcount F	Period 1	707	676	588	425	
Headcount P	Period 2	674	707	676	588	
Headcount F	Ratio	0.95	1.05	1.15	1.38	_

Definition:

Trend in student headcount based on a three year rolling average. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: One-tenth-day of each term. (Note: this measure is not used in the calculation of the Program Dashboard score since it parallels trends depicted in Credit Hours.)

Methodology:

In order to establish a meaningful enrollment statistic which applies to large as well as small disciplines/programs a "ratio" was calculated based on a three year rolling average of student headcount.

The formula used to calculate this measure involves three simple steps:

a. Year 1 + Year 2 + Year 3 / 3 = Period 1b. Year 2 + Year 3 + Year 4 / 3 = Period 2c. Period 2 / Period 1 = Ratio

If the ratio is greater than "1" this means there has been an enrollment increase. On the other hand, if the ratio is less than "1" this translates into an enrollment decline. The larger the number the larger the enrollment increase. Likewise, the lower the number the greater the enrollment decline.

Friday, January 11, 2008

Credit Hour Trend Ratio

Prefix	ATA
Prefix Title	Automobile Servicing

	2006-07	2005-06	2004-05	2003-04
Credit Hour Year 1	2,868	2,344	1,840	916
Credit Hour Year 2	2,896	2,868	2,344	1,840
Credit Hour Year 3	2,716	2,896	2,868	2,344
Credit Hour Year 4	2,476	2,716	2,896	2,868
Credit Hour Period 1	2,827	2,703	2,351	1,700
Credit Hour Period 2	2,696	2,827	2,703	2,351
Credit Hour Ratio	0.95	1.05	1.15	1.38

Definition:

Trend in student credit hours based on a three year rolling average. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: One-tenth-day of each term.

Methodology:

In order to establish a meaningful enrollment statistic which applies to large as well as small disciplines/programs a "ratio" was calculated based on a three year rolling average of student credit hours.

The formula used to calculate this measure involves three simple steps:

a. Year 1 + Year 2 + Year 3 / 3 = Period 1b. Year 2 + Year 3 + Year 4 / 3 = Period 2c. Period 2 / Period 1 = Ratio

If the ratio is greater than "1" this means there has been an enrollment increase. On the other hand, if the ratio is less than "1" this translates into an enrollment decline. The larger the number the larger the enrollment increase. Likewise, the lower the number the greater the enrollment decline.

Percent of Minority Students

Prefix ATA

Prefix Title Automobile Servicing

	2006-07	2005-06	2004-05	2003-04
Minority Students	82	92	89	109
Total Students	327	362	406	415
Percent of Minority Students	25.1%	25.4%	21.9%	26.3%

Definition:

The percent of students who are minority. Minority status is self-reported by the student and includes: African American, Asian, Hispanic, Native American Indian and Other. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: end of session for each term.

Methodology:

Percentages are based on known data and exclude missing information.

Percent of Withdrawals

Prefix ATA

Prefix Title Automobile Servicing

	2006-07	2005-06	2004-05	2003-04	
Total Withdrawals	45	44	43	40	
Total Grades	563	646	646	652	
Percent of Withdrawals	8.0%	6.8%	6.7%	6.1%	

Definition:

The percent of students who withdraw from their course after the term begins. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: End of session files, after grades are posted.

Methodology:

Percent of withdrawals is derived by dividing the total number of student initiated withdrawals by the total number of grades and marks awarded throughout the academic year. The Withdrawal-Passing (WP), and Withdrawal-Failing (WF) are considered Withdrawals (W). Meanwhile, calculations exclude: Audit (AU), Not Attended (N), and Not Reported (NR).

- Consider a website for all syllabi to be posted for faculty/adjuncts to view
- The college has an Adjunct committee researching how to train, retain and interact with adjunct faculty.
- Syllabi shared for at least guitar, piano, and rock and roll courses could be helpful. The Program Coordinator might consider follow up with adjuncts regarding this recommendation.
- Forward equipment concerns to the Dean and IT on each campus identified in the review to ensure all equipment is functional for Music classrooms.
- It is recommended the Deans work with department chairs to ensure scheduling for Music classrooms have necessary equipment and that it is functional.

Curriculum Review Committee Recommendations

Auto Servicing

Faculty Coordinator: Henry Hildebrandt June 6, 2008

Assessment

- Consider using certification test results as an assessment. These are performance objectives
- Consider once a year completing a survey of students who are working and their certification results.

Curriculum

- Auto Servicing could offer certificate of achievements that encourage movement to Certificate completion
- Review and update faculty suggested course description changes
- On the Auto Servicing handout made available to students remove the need for calculus since it is not part of the curriculum and send to graphics
- For consistency consider changing all ATA/AUT/DAT course codes to one code, ATA or MVT (Motor Vehicle Tech)

Needs/Resources

- Complete a needs analysis for the possibility of the Chassis Dynameter equipment and follow up with a discussion with the dean
- Due to needs consider an additional paraprofessional
- Recourses needed to keep program updated: laptops, wireless laboratory/software, state of art scan tools

Review Concerns

- As part of the PROE survey for programs the faculty and advisory committee survey data still needs to be completed and brought back to CRC to complete the review
- Assessment findings were not completed and need to be completed and brought back to CRC to finish the review
- Review considered incomplete until faculty coordinator presents the assessment and survey findings

Completed Auto Servicing Review

February 06, 2009

Assessment

• Faculty Coordinator to work with Dean/SOAC Facilitator to condense eight learning outcomes to a manageable plan for quality assessment

Curriculum

- Catalogue description could include field trip
- Continue to work with the Dean regarding course development to update to industry standards...biofuels, hybrid, electric
- PROE review completed

Mays, Gail A

rom: ent: To: Cc: Subject: Mays, Gail A Wednesday, June 11, 2008 2:11 PM Hildebrandt, Harry A; Khan, Tahir B CRC Auto Servicing review

Tony,

You certainly piqued the interest of many of the CRC "females" in your Auto Servicing review. The presentation its self was through and you were able to speak to categories that were not completed on the Self -Study. CRC recommends that you complete the appropriate findings for assessments and the necessary faculty and advisory committee surveys before CRC can consider the review completed. I did receive your hard copy assessment findings from the adjunct faculty which you will need to collate into the findings forms I will resend to you. If you have any questions I will be here all summer to assist you.

Gail CRC Chair



2-1-07 to 3-1-08

Learning Outcome ID 29

Students will prove their ability to select and utilize replacement parts and components that have the highest level of reliability and durability, at a reasonable cost.

Benchmark 1

In 25% of the sample of completed student assignments, students will accurately locate specifications and service bulletins and identify appropriate parts 90% of the time.

Assessment Method 1	Findings 1	Benchmark Met 1		Dates
Sample of completed student assignments to	Assessment not implemented.	Unknown	Assessed	05/2006
locate specifications and service bulletins			Received	05/2007
through the computer automotive information				,,
systems and identify appropriate parts.				

2-1-07 to 3-1-08

Learning Outcome ID 28

Students will obtain competencies to pass the Michigan licensing and national Automotive Service Excellence (ASE) certifications and maintain institutional NATEF certification.

Benchmark 1

90% of students who complete courses with a B or better will be able to pass state and national tests (ASE) related to their field of study.

Assessment Method 1	Findings 1	Benchmark Met 1		Dates
Students will be required to present verification	Assessment not implemented.	Unknown	Assessed	.05/2006
of three licenses / certifications prior to			Received	05/2007
graduation.				

2-1-07 to 3-1-08

Learning Outcome ID 27

Will be able to test, diagnose, adjust or replace motor vehicle components and locate both specifications and lifetime service modifications.

Benchmark 1

In ATA1400, students will accurately test and diagnose vehicle failures, then locate specifications and service bulletins and identify appropriate parts 90% of the time.

Assessment Method 1	Findings 1	Benchmark Met 1		Dates
In 25% of the sample student assignments,	Assessment not implemented.	Unknown	Assessed	05/2006
students will locate specifications and service bulletins through the computer automotive			Received	05/2007
information systems and identify appropriate				
parts 90% of the time.				



2-1-07 to 3-1-08

Learning Outcome ID 26

Use safe practices related to performing diagnostic and repair procedures, with emphasis on environmentally sound methods.

Benchmark 1

100% of sampled tests have scores of 100%.

Assessment Method 1	Findings 1	Benchmark Met 1		Dates
20% of students' safety tests in each course.	Assessment not implemented.	Unknown	Assessed	05/2006
			Received	05/2007

Tuesday, March 11, 2008

2-1-07 to 3-1-08

Learning Outcome ID 25

Provide proof of competence to pass the Michigan licensing and national Automotive Service Excellence (ASE) certifications.

Benchmark 1

90% of students who complete courses with a B or better will be able to pass state and national tests (ASE) related to their field of study.

Assessment Method 1	Findings 1	Benchmark Met 1		Dates
Collecting information about passage of	Assessment not implemented.	Unknown	Assessed	05/2006
licensing and certifications within the present			Received	05/2007
student body.				

Learning Outcome ID 25

Provide proof of competence to pass the Michigan licensing and national Automotive Service Excellence (ASE) certifications.

Benchmark 2

90% of students who complete courses with a B or better will be able to pass state and national tests (ASE) related to their field of study.

Assessment Method 2	Findings 2	Benchmark Met 2		Dates
Students would be sampled 2 to 10 years after	Assessment not implemented.	Unknown	Assessed	05/2006
leaving the program to assess passage rates			Received	05/2007
regarding licensing and certifications.				•



2-1-07 to 3-1-08

Learning Outcome ID 24

Will be able to select and utilize replacement parts and components that have the highest level of reliability and durability, at a reasonable cost.

Benchmark 1

In 90% of the sample of completed student assignments, students will accurately locate specifications and service bulletins and identify appropriate parts 90% of the time.

Assessment Method 1	Findings 1	Benchmark Met 1		Dates
Sample of completed student assignments to	Assessment not implemented.	Unknown	Assessed	05/2006
locate specifications and service bulletins			Received	05/2007
through the computer automotive information				,
systems and identify appropriate parts.				

2-1-07 to 3-1-08

Learning Outcome ID 23

Will be able to locate both specifications and lifetime service modifications.

Benchmark 1

In 90% of the sample of completed student assignments, students will accurately locate specifications and service bulletins and identify appropriate parts 90% of the time.

Assessment Method 1	Findings 1	Benchmark Met 1		Dates
In a random sampling of students, appropriate repair/replacement parts will be identified 90%	Assessment not implemented.	Unknown	Assessed Received	05/2006 05/2007
or the time.	<i>۲</i> ـ			

Learning Outcome ID 23

Will be able to locate both specifications and lifetime service modifications.

Benchmark 2

In 90% of the sample of completed student assignments, students will accurately locate specifications and service bulletins and identify appropriate parts 90% of the time.

Assessment Method 2	Findings 2	Benchmark Met 2		Dates
In a random sampling of students, 90% will	Assessment not implemented.	Unknown	Assessed	05/2006
accurately locate specifications and service			Received	05/2007
bulletins and attach them to their work orders.				,,





2-1-07 to 3-1-08

Learning Outcome ID 22

Be proficient with all tools and diagnostic equipment required for the licensed area, and use manufacturers' recommended procedures.

Benchmark 1

In 90% of the sample of completed student assignments, components, parts, and systems function as they would normally in field operations and students demonstrate their knowledge of manufacturers' recommended procedures.

Assessment Method 1	Findings 1	Benchmark Met 1		Dates
Sample of completed student assignments	Assessment not implemented.	Unknown	Assessed	05/2006
covering student implementation of manufacturers' recommended procedures in less than 200% of manufacturers flat rate time.			Received	05/2007

2-1-07 to 3-1-08

Learning Outcome ID 21

Use safe practices related to the performance of diagnostic and repair procedures, with emphasis on environmentally sound methods.

Benchmark 1

100% of sampled tests have scores of 100%.

Assessment Method 1	Findings 1	Benchmark Met 1		Dates
Sample of students' safety tests in each course.	Assessment not implemented.	Unknown	Assessed	05/2006
			Received	05/2007

Program Findings Report Automobile Servicing 2-1-07 to 3-1-08

Statement of Purpose

The purpose of this program is to prepare students for careers in industry and business, to update students' education for an existing career, or to prepare students for transfer to baccalaureate programs. Students are provided with both a theoretical and practical knowledge base. The specific goal of the program is to graduate highly trained Automotive Servicing & Engineering Technicians who have a firm foundation in theory, diagnosis, repair, and rebuilding of motor vehicle component systems, with the ability to understand new and future applications based on their understanding of applied physics. The students will also learn that knowledge alone will not guarantee success and must never forget that honesty, integrity, reliability, respect, patience, and the relentless pursuit of continual improvement will guaranty success.

Catalog Description

The Automobile Servicing Associate in Applied Science Degree and Certificate programs are designed to prepare students to qualify for entrylevel servicing operations in the automotive field. This program consists of eight specialized courses designed in accordance with the mandatory Auto Mechanic Certification tests required for state licensure. Completion of the program should prepare the student to become certified by the state of Michigan in up to eight areas of specialization. A large portion of class time will be spent in the laboratory allowing the student to gain work experience in an automobile servicing situation.

Students involved in this program are expected to provide their own eye and ear protection, as well as appropriate work uniforms. Students will perform all service operations in a safe and proper manner, developing appropriate work habits.

Source: OCC, Office of Assessment & Effectiveness (Assessment Database) Tuesday, March 11, 2008 Page 1

Learning Outcomes

Students will prove their ability to select and utilize replacement parts and components that have the highest level of reliability and durability, at a reasonable cost.

	Benchmark	Assessment Method	Timeline
1.	In 25% of the sample of completed student assignments, students will accurately locate specifications and service bulletins and identify appropriate parts 90% of the time.	Sample of completed student assignments to locate specifications and service bulletins through the computer automotive information systems and identify appropriate parts.	05/07

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Learning Outcomes

Students will obtain competencies to pass the Michigan licensing and national Automotive Service Excellence (ASE) certifications and maintain institutional NATEF certification.

	Benchmark	Assessment Method	Timeline
1.	90% of students who complete courses with a B or better will be able to pass state and national tests (ASE) related to their field of study.	Students will be required to present verification of three licenses / certifications prior to graduation.	05/07
2.			
3.			
4.			

5.

Learning Outcomes

Will be able to test, diagnose, adjust or replace motor vehicle components and locate both specifications and lifetime service modifications.

	Benchmark	Assessment Method	Timeline
1.	In ATA1400, students will accurately test and diagnose vehicle failures, then locate specifications and service bulletins and identify appropriate parts 90% of the time.	In 25% of the sample student assignments, students will locate specifications and service bulletins through the computer automotive information systems and identify appropriate parts 90% of the time.	05/07

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Learning Outcomes

Use safe practices related to performing diagnostic and repair procedures, with emphasis on environmentally sound methods.

	Benchmark	Assessment Method	Timeline
1.	100% of sampled tests have scores of 100%.	20% of students' safety tests in each course.	05/07
2.			
3.			
4.			
5.			

Learning Outcomes

Provide proof of competence to pass the Michigan licensing and national Automotive Service Excellence (ASE) certifications.

	Benchmark	Assessment Method	Timeline
1.	90% of students who complete courses with a B or better will be able to pass state and national tests (ASE) related to their field of study.	Collecting information about passage of licensing and certifications within the present student body.	05/07
2.	90% of students who complete courses with a B or better will be able to pass state and national tests (ASE) related to their field of study.	Students would be sampled 2 to 10 years after leaving the program to assess passage rates regarding licensing and certifications.	05/07

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Learning Outcomes

Will be able to select and utilize replacement parts and components that have the highest level of reliability and durability, at a reasonable cost.

	Benchmark	Assessment Method	Timeline
1.	In 90% of the sample of completed student assignments, students will accurately locate specifications and service bulletins and identify appropriate parts 90% of the time.	Sample of completed student assignments to locate specifications and service bulletins through the computer automotive information systems and identify appropriate parts.	05/07

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Learning Outcomes

Will be able to locate both specifications and lifetime service modifications.

	Benchmark	Assessment Method	Timeline
1.	In 90% of the sample of completed student assignments, students will accurately locate specifications and service bulletins and identify appropriate parts 90% of the time.	In a random sampling of students, appropriate repair/replacement parts will be identified 90% of the time.	05/07
2.	In 90% of the sample of completed student assignments, students will accurately locate specifications and service bulletins and identify appropriate parts 90% of the time.	In a random sampling of students, 90% will accurately locate specifications and service bulletins and attach them to their work orders.	05/07

3.

4.

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Learning Outcomes

Be proficient with all tools and diagnostic equipment required for the licensed area, and use manufacturers' recommended procedures.

	Benchmark	Assessment Method	Timeline
1.	In 90% of the sample of completed student assignments, components, parts, and systems function as they would normally in field operations and students demonstrate their knowledge of manufacturers' recommended procedures.	Sample of completed student assignments covering student implementation of manufacturers' recommended procedures in less than 200% of manufacturers flat rate time.	05/07

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Learning Outcomes

Use safe practices related to the performance of diagnostic and repair procedures, with emphasis on environmentally sound methods.

	Benchmark	Benchmark Assessment Method		
1 .	100% of sampled tests have scores of 100%.	Sample of students' safety tests in each course.	05/07	
2.				
3.				
4.				
5.				

Source: OCC, Office of Assessment & Effectiveness (Assessment Database) Friday, January 11, 2008

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The purpose of this program is to prepare students for careers in industry and business, to update students' education for an existing career, or to prepare students for transfer to baccalaureate programs. Students are provided with both a theoretical and practical knowledge base. The specific goal of the program is to graduate highly trained Automotive Servicing & Engineering Technicians who have a firm foundation in theory, diagnosis, repair, and rebuilding of motor vehicle component systems, with the ability to understand new and future applications based on their understanding of applied physics. The students will also learn that knowledge alone will not guarantee success and must never forget that honesty, integrity, reliability, respect, patience, and the relentless pursuit of continual improvement will guaranty success.

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Occupational Abilities

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Ability	Importance	Imp (0-100)	Level	LVI (0-100)
	Important	56	Advanced	68
Information Ordering	very important	/8	Advanced	61
	Very Important	81	Advanced	61
	Very Important	/8	Advanced	59
Finger Dexterity	Important	69	Advanced	59
Visualization	Important	60	Advanced	59
Reaction Time	Important	53	Advanced	57
Oral Comprehension	Important	.69	Advanced	57
Written Comprehension	Important	60	Advanced	57
Speed of Closure	Important	56	Advanced	55
Near Vision	Very Important	75	Advanced	55
Oral Expression	Important	66	Advanced	55
Flexibility of Closure	Important	72	Advanced	55
Hearing Sensitivity	Important	69	Advanced	55
Control Precision	Important	69	Advanced	55
Perceptual Speed	Important	66	Advanced	54
Visual Color Discrimination	Important	56	Advanced	54
Deductive Reasoning	Very Important	78	Advanced	54
Auditory Attention	Important	60	Advanced	52
Category Flexibility	Important	56	Advanced	52
Selective Attention	Important	63	Advanced	52
Arm-Hand Steadiness	Very Important	75	Advanced	50
Speech Recognition	Important	60	Advanced	50
Manual Dexterity	Important	72	Intermediate	48
Response Orientation	Important	50	Intermediate	48
Fluency of Ideas	Important	50	Intermediate	46
Static Strength	Important	56	Intermediate	46
Trunk Strength	Important	50	Intermediate	43
Sound Localization	Important	50	Intermediate	43
Originality	Important	50	Intermediate	43
Multilimb Coordination	Important	56	Intermediate	43
Speech Clarity	Important	66	Intermediate	43
Memorization	Important	53	Intermediate	43
Depth Percention	Important	60	Intermediate	
Written Expression	Somewhat important	44	Intermediate	30
Glare Sensitivity	Somewhat Important	38	Intermediate	- 38
Rate Control	Somewhat Important	41	Intermediate	38
	Somewhat Important	41	Intermediate	38
Far Vision	Important	56	Intermediate	36
Mrist Finger Speed	Somewhat Important	35	Intermediate	30
Spatial Orientation	Somewhat Important		Intermediate	<u> </u>
Night Vision	Somewhat Important	41	Intermediate	30
Stemino	Somewhat Important	41	Intermediate	
Statilita	Somewhat Important		Intermediate	
Speed of Limb Wovement	Somewhat Important	30	Intermediate	
	Somewhat Important	41	Intermediate	30
Number Facility	Somewhat Important	38	Intermediate	30
Perprieral Vision		38		30
	Somewnat Important	35		
	Somewnat Important	41		29
Gross Body Equilibrium	Somewnat Important	35		21
Explosive Strength	Not important	19		14
Dynamic Flexibility	Not Important	9	Basic	7

Source: O*NET Database 11

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Occupational Skills

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Skill	Importance	Imp (0-100)	Level	Lvl (0-100)
Troubleshooting	Very Important	98	Expert	75
Active Learning	Very Important	93	Advanced	74
Reading Comprehension	Very Important	91	Advanced	71
Complex Problem Solving	Very Important	87	Advanced	67
Repairing	Very Important	95	Advanced	67
Equipment Maintenance	Very Important	76	Advanced	67
Critical Thinking	Very Important	90	Advanced	66
Equipment Selection	Very Important	94	Advanced	65
Installation	Very Important	87	Advanced	62
Instructing	important	70	Advanced	62
Coordination	Important	70	Advanced	61
Learning Strategies	Very Important	76	Advanced	55
Active Listening	Very Important	81	Advanced	55
Speaking	Very Important	76	Advanced	52
Operation Monitoring	Important	64	Advanced	51
Mathematics	Important	66	Advanced	51
Monitoring	Important	62	Advanced	51
Writing	Important	70	Intermediate	49
Technology Design	Important	57	Intermediate	48
Quality Control Analysis	Important	58	Intermediate	
Time Management	Important	73	Intermediate	47
Judgment and Decision Making	Important	65	Intermediate	46
Operation and Control	Important	62	Intermediate	46
Systems Analysis	Somewhat Important	.46	Intermediate	40
Science	Somewhat Important	49	Intermediate	38
Systems Evaluation	Somewhat Important	41	Intermediate	37
Social Perceptiveness	Somewhat Important	39	Intermediate	37
Persuasion	Somewhat Important	31	Intermediate	36
Service Orientation	Somewhat Important	35	Intermediate	36
Management of Material Resources	Somewhat Important	35	Intermediate	35
Operations Analysis	Somewhat Important	35	Intermediate	32
Negotiation	Somewhat Important	28	Intermediate	31
Management of Financial Resources	Somewhat Important	26	Intermediate	28
Programming	Somewhat Important	26	Intermediate	25
Management of Personnel Resources	Not Important	22	Basic	19

Source: O*NET Database 11

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Occupational Skills Analysis Automotive Master Mechanics (49-3023.01)

Repair automobiles, trucks, buses, and other vehicles. Master mechanics repair virtually any part on the vehicle or specialize in the transmission system.

Occupational Knowledge

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Knowledge	Importance	Imp (0-100)	Level	Lvl (0-100)
Mechanical	Very Important	85	Expert	87
Computers and Electronics	Important	62	Advanced	58
Education and Training	Important	55	Intermediate	47
Customer and Personal Service	Important	61	Intermediate	46
Physics	Somewhat Important	43	Intermediate	45
Mathematics	Somewhat Important	49	Intermediate	44
Engineering and Technology	Somewhat Important	45	Intermediate	41
Public Safety and Security	Somewhat Important	46	Intermediate	37
Chemistry	Somewhat Important	36	Intermediate	34
English Language	Somewhat Important	36	Intermediate	33
Transportation	Somewhat Important	33	Intermediate	27
Sales and Marketing	Not Important	24	Intermediate	26
Administration and Management	Somewhat Important	26	Basic	24
Design	Not Important	18	Basic	23
Telecommunications	Somewhat Important	27	Basic	23
Psychology	Not Important	20	Basic	20
Communications and Media	Not Important	22	Basic	19
Building and Construction	Not Important	15	Basic	19
Law and Government	Not Important	13	Basic	17
Economics and Accounting	Not Important	15	Basic	14
Clerical	Not Important	11	Basic	13
Personnel and Human Resources	Not Important	12	Basic	13
Foreign Language	Not Important	7	Basic	10
Production and Processing	Not Important	12	Basic	10
Medicine and Dentistry	Not Important	7	Basic	8
Therapy and Counseling	Not Important	3	Basic	4
Geography	Not Important	3	Basic	3
History and Archeology	Not Important	3	Basic	3
Food Production	Not Important	2	Basic	2
Sociology and Anthropology	Not Important	0	Basic	0
Philosophy and Theology	Not Important	0	Basic	0
Fine Arts	Not Important	0	Basic	- 0
Biology	Not Important	0	Basic	0

Occupational Abilities

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Ability	Importance	Imp (0-100)	Level	Lvl (0-100)
Extent Flexibility	Very Important	75	Advanced	63
Control Precision	Important	72	Advanced	57
Multilimb Coordination	Important	63	Advanced	57
Visualization	Important	60	Advanced	.55
Deductive Reasoning	Important	63	Advanced	55
Hearing Sensitivity	Important	69	Advanced	54
Auditory Attention	Important	63	Advanced	54
Finger Dexterity	Important	69	Advanced	54
Information Ordering	Important	53	Advanced	52
Manual Dexterity	Very Important	75	Advanced	52
Oral Expression	Important	60	Advanced	50
Selective Attention	Important	66	Advanced	50
Oral Comprehension	Important	66	Advanced	50
Inductive Reasoning	Important	63	Intermediate	48
Near Vision	Important	66	Intermediate	48
Arm-Hand Steadiness	Very Important	75	Intermediate	48
Problem Sensitivity	Important	72	Intermediate	48
Reaction Time	Somewhat Important	41	Intermediate	46
Visual Color Discrimination	Somewhat Important	41	Intermediate	45
Speed of Closure	Somewhat Important	47	Intermediate	- 43
Flexibility of Closure	Somewhat Important	44	Intermediate	43
Category Flexibility	Somewhat Important	47	Intermediate	43
Static Strength	Somewhat Important	38	Intermediate	43
Depth Perception	Somewhat Important	41	Intermediate	43
Written Comprehension	Important	50	Intermediate	43
Trunk Strength	Important	53	Intermediate	41
Response Orientation	Somewhat Important	41	Intermediate	41
Time Sharing	Somewhat Important	41	Intermediate	41
Written Expression	Somewhat Important	44	Intermediate	39
Speech Recognition	Important	56	Intermediate	39
Perceptual Speed	Somewhat Important	41	Intermediate	38
Fluency of Ideas	Somewhat Important	38	Intermediate	38
Far Vision	Somewhat Important	38	Intermediate	36
Glare Sensitivity	Somewhat Important	35	Intermediate	34
Gross Body Coordination	Somewhat Important		Intermediate	34
Rate Control	Somewhat Important	28	Intermediate	32
Originality	Somewhat Important	35	Intermediate	32
Speech Clarity	Important	53	Intermediate	32
Dynamic Strength	Somewhat Important	28	Intermediate	30
Memorization	Somewhat Important		Intermediate	29
Mrist-Finger Speed	Somewhat Important	25	Intermediate	23
Spatial Orientation	Somewhat Important	20	Intermediate	- 25
Sound Localization	Not Important	20	Intermediate	25
Number Facility	Not Important	10	Intermediate	25
Stamina	Not Important	13	Basic	23
Speed of Limb Movement	Not important		Basic	
Gross Body Equilibrium	Not Important	22	Basic	23
Mathematical Reasoning	Not Important	22	Basic	
Night Vision	Not Important	10	Basic	···
Derinheral Vision	Not Important	10	Basic	14
Dynamic Elevibility	Not Important		Basic	
Evaluation Strongth	Not important	0	Dasic Dasic	
	inot important	3	Dasic	4

Occupational Skills

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Skill	Importance	Imp (0-100)	Level	Lvl (0-100)
Repairing	Very Important	87	Expert	79
Active Learning	Very Important	81	Expert	75
Troubleshooting	Very Important	87	Advanced	73
Monitoring	Important	72	Advanced	70
Equipment Selection	Very Important	75	Advanced	68
Learning Strategies	Important	67	Advanced	65
Operation Monitoring	Important	73	Advanced	65
Equipment Maintenance	Very Important	89	Advanced	65
Instructing	Important	72	Advanced	64
Coordination	Important	65	Advanced	64
Critical Thinking	Very Important	79	Advanced	63
Installation	Very Important	75	Advanced	58
Active Listening	Very Important	76	Advanced	57
Judgment and Decision Making	Important	67	Advanced	57
Reading Comprehension	Very Important	79	Advanced	56
Writing	Important	60	Advanced	53
Complex Problem Solving	Important	59	Advanced	51
Operation and Control	Important	- 69	Advanced	51
Time Management	Important	74	Intermediate	49
Persuasion	Somewhat Important	48	Intermediate	47
Technology Design	Somewhat Important	34	Intermediate	47
Mathematics	Somewhat Important	39	Intermediate	46
Systems Analysis	Important	53	Intermediate	46
Systems Evaluation	Somewhat Important	47	Intermediate	45
Social Perceptiveness	Important	52	Intermediate	45
Service Orientation	Somewhat Important	49	Intermediate	43
Speaking	Somewhat Important	43	Intermediate	42
Quality Control Analysis	Important	59	Intermediate	41
Operations Analysis	Somewhat Important	34	Intermediate	40
Management of Personnel Resources	Important	5.1	Intermediate	38
Negotiation	Somewhat Important	34	Intermediate	37
Science	Somewhat Important	35	Intermediate	34
Management of Material Resources	Somewhat Important	40	Intermediate	32
Programming	Somewhat Important	39	Basic	23
Management of Financial Resources	Somewhat Important	34	Basic	22

Source: O*NET Database 11

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Occupational Skills Analysis Automotive Specialty Technicians (49-3023.02)

Repair only one system or component on a vehicle, such as brakes, suspension, or radiator.

Occupational Knowledge

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Knowledge	Importance	Imp (0-100)	Level	<u>Lvl (0-100)</u>
Mechanical	Very Important	89	Expert	84
Customer and Personal Service	Very Important	85	Expert	79
Engineering and Technology	Important	72	Advanced	60
Administration and Management	Important	68	Advanced	59
Computers and Electronics	Important	65	Advanced	56
Physics	Somewhat Important	45	Advanced	54
Education and Training	Important	57	Advanced	51
Mathematics	Important	53	Intermediate	47
Sales and Marketing	Important	68	Intermediate	45
Clerical	Somewhat Important	46	Intermediate	43
Design	Somewhat Important	38	Intermediate	42
Psychology	Somewhat Important		Intermediate	39
English Language	Somewhat Important	42	Intermediate	36
Production and Processing	Somewhat Important	45	Intermediate	35
Personnel and Human Resources	Somewhat Important	40	Intermediate	35
Chemistry	Somewhat Important	31	Intermediate	35
Law and Government	Not Important	21	Intermediate	29
Foreign Language	Somewhat Important	30	Intermediate	29
Transportation	Somewhat Important	40	Intermediate	29
Public Safety and Security	Somewhat Important	33	Intermediate	26
Communications and Media	Somewhat Important	36	Intermediate	25
Sociology and Anthropology	Not Important	19	Basic	24
Therapy and Counseling	Not Important	14	Basic	24
Economics and Accounting	Somewhat Important	29	Basic	23
Philosophy and Theology	Not Important	19	Basic	22
Geography	Not Important	15	Basic	20
Medicine and Dentistry	Not Important	15	Basic	16
Telecommunications	Not Important	14	Basic	13
History and Archeology	Not Important	5	Basic	12
Building and Construction	Not Important	3	Basic	3
Fine Arts	Not Important	0	Basic	0
Food Production	Not Important	.0	Basic	0
Biology	Not Important	0	Basic	0

Source: O*NET Database 11

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Occupational Abilities

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Ability	Importance	Imp (0-100)	Level	Lvl (0-100)
Problem Sensitivity	Very Important	78	Advanced	63
Information Ordering	Important	63	Advanced	59
Visualization	Important	63	Advanced	59
Inductive Reasoning	Important	63	Advanced	57
Hearing Sensitivity	Important	63	Advanced	55
Oral Expression	Important	66	Advanced	54
Extent Flexibility	Important	63	Advanced	54
Oral Comprehension	Important	66	Advanced	54
Control Precision	Important	66	Advanced	52
Near Vision	Important	69	Advanced	50
Flexibility of Closure	Important	50	Advanced	50
Finger Dexterity	Important	63	Advanced	50
Static Strength	Important	50	Advanced	50
Deductive Reasoning	Important	63	Advanced	50
Multilimb Coordination	Important	69	Intermediate	48
Selective Attention	Important	63	Intermediate	48
Manual Dexterity	Very Important	75	Intermediate	46
Auditory Attention	Important	60	Intermediate	. 46
Visual Color Discrimination	Somewhat Important	41	Intermediate	46
Time Sharing	Somewhat Important	35	Intermediate	43
Speed of Closure	Somewhat Important	41	Intermediate	41
Arm-Hand Steadiness	Important	66	Intermediate	41
Trunk Strength	Important	63	Intermediate	41
Depth Perception	Important	50	Intermediate	41
Written Comprehension	Somewhat Important	41	Intermediate	41
Category Elexibility	Somewhat Important	35	Intermediate	36
Gross Body Coordination	Somewhat Important	41	Intermediate	36
Speech Clarity	Important	56	Intermediate	36
Speech Recognition	Important	50	Intermediate	34
Reaction Time	Somewhat Important	35	Intermediate	32
Written Expression	Somewhat Important	41	Intermediate	32
Percentual Sneed	Somewhat Important	31	Intermediate	32
Gross Body Equilibrium	Somewhat Important	47	Intermediate	32
Dynamic Strength	Somewhat Important	35	Intermediate	
Glare Sensitivity	Somewhat Important	41	Intermediate	29
Sound Localization	Somewhat Important	31	Intermediate	29
Memorization	Somewhat Important	31	Intermediate	27
Response Orientation	Somewhat Important	28	Intermediate	27
Far Vision	Somewhat Important	31	Intermediate	25
Rate Control	Not Important	22	Basic	23
Stamina	Somewhat Important	35	Basic	23
Wrist-Finger Speed	Not Important	22	Basic	23
Fluency of Ideas	Not Important	19	Basic	21
Speed of Limb Movement	Somewhat Important	25	Basic	21
Peripheral Vision	Somewhat Important	25	Basic	20
Spatial Orientation	Somewhat Important	28	Basic	18
Originality	Not Important	16	Basic	13
Night Vision	Not Important	13	Basic	11
Mathematical Reasoning	Not Important	10	Basic	7
Explosive Strength	Not Important	i0	Basic	7
Dynamic Elevibility	Not Important	3	Basic	2
Number Facility	Not Important	3	Basic	2
	not important	0	24310	

Occupational Skills

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Skill	Importance	Imp (0-100)	Level	Lvi (0-100)
Equipment Maintenance	Very Important	87	Advanced	72
Troubleshooting	Very Important	84	Advanced	71
Repairing	Very Important	82	Advanced	68
Coordination	Important	62	Advanced	54
Installation	Important	63	Advanced	54
Learning Strategies	Important	53	Advanced	53
Equipment Selection	Important	62	Advanced	51
Instructing	Important	50	Intermediate	49
Reading Comprehension	Important	66	Intermediate	48
Social Perceptiveness	Important	52	Intermediate	47
Time Management	Important	53	Intermediate	47
Active Learning	Important	51	Intermediate	46
Critical Thinking	Somewhat Important	49	Intermediate	45
Active Listening	Important	55	Intermediate	43
Complex Problem Solving	Somewhat Important	48	Intermediate	42
Writing	Important	50	Intermediate	42
Judgment and Decision Making	Important	55	Intermediate	42
Monitoring	Somewhat Important	45	Intermediate	41
Speaking	Important	50	Intermediate	41
Science	Somewhat Important	40	Intermediate	41
Technology Design	Somewhat Important	37	Intermediate	37
Negotiation	Somewhat Important	35	Intermediate	36
Persuasion	Somewhat Important	32	Intermediate	36
Service Orientation	Somewhat Important	35	Intermediate	36
Mathematics	Somewhat Important	45	Intermediate	36
Systems Analysis	Somewhat Important	. 37	Intermediate	33
Operation and Control	Somewhat Important	33	Intermediate	33
Quality Control Analysis	Somewhat Important	32	Intermediate	32
Systems Evaluation	Somewhat Important	35	Intermediate	32
Operation Monitoring	Somewhat Important	. 32	Intermediate	31
Management of Personnel Resources	Somewhat Important	29	Intermediate	29
Management of Material Resources	Somewhat Important	30	Intermediate	28
Management of Financial Resources	Somewhat Important	27	Intermediate	27
Operations Analysis	Somewhat Important	27	Intermediate	26
Programming	Not Important	9	Basic	11

Occupational Skills Analysis Bus and Truck Mechanics and Diesel Engine Specialists (49-3031.00)

Diagnose, adjust, repair, or overhaul trucks, buses, and all types of diesel engines. Includes mechanics working primarily with automobile diesel engines.

Occupational Knowledge

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Knowledge	Importance	Imp (0-100)	Levei	Lvl (0-100)
Mechanical	Very Important	81	Expert	77
Public Safety and Security	Important	58	Advanced	53
Transportation	Important	61	Intermediate	49
Engineering and Technology	Somewhat Important	45	Intermediate	39
Law and Government	Somewhat Important	45	Intermediate	37
Mathematics	Somewhat Important	34	Intermediate	36
Chemistry	Somewhat Important	32	Intermediate	35
English Language	Somewhat Important	45	Intermediate	35
Education and Training	Somewhat Important	36	Intermediate	34
Physics	Somewhat Important	34	Intermediate	34
Customer and Personal Service	Somewhat Important	41	Intermediate	. 31
Computers and Electronics	Somewhat Important	31	Intermediate	31
Production and Processing	Somewhat Important	33	Intermediate	30
Clerical	Somewhat Important	25	Intermediate	29
Design	Not Important	23	Intermediate	27
Communications and Media	Not Important	15	Basic	20
Building and Construction	Not Important	12	Basic	19
Telecommunications	Not Important	15	Basic	16
Administration and Management	Not Important	18	Basic	16
Psychology	Not Important	17	Basic	16
Medicine and Dentistry	Not Important	15	Basic	15
Geography	Not Important	15	Basic	13
Personnel and Human Resources	Not Important	12	Basic	11
Economics and Accounting	Not Important	9	Basic	7
Sociology and Anthropology	Not Important	4	Basic	7
Therapy and Counseling	Not Important	4	Basic	6
Sales and Marketing	Not Important	4	Basic	5
Philosophy and Theology	Not Important		Basic	5
Foreign Language	Not Important	5	Basic	5
History and Archeology	Not Important	4	Basic	. 4
Food Production	Not important	3	Basic	3
Biology	Not Important	2	Basiç	2
Fine Arts	Not Important	0	Basic	, 0

The following report provides detailed information on the knowledge, skills and abilities required for a given occupation. Consideration of these different competencies and levels of attainment while designing and reviewing curriculum will ensure that students enrolled in our programs are adequately prepared for employment.

In particular this report provides:

Importance of the competency to the occupation (in general terms)

- Not important
- Somewhat important
- Important
- Very important
- Extremely important

Importance of the competency to the occupation (in specific terms).

- 0 to 20 = not important
- 21 to 40 = somewhat important
- 41 to 60 = important
- 61 to 80 = very important
- 81 to 100 = extremely important

Level of Attainment in the competency required by the occupation:

- Basic = 0 to 24
- Intermediate = 25 to 49
- Advanced = 50 to 74
- Expert = 75 to 100

SOC Code 49-3023

Name Automotive service technicians and mechanics

Definition

Diagnose, adjust, repair, or overhaul automotive vehicles. Exclude "Automotive Body and Related Repairers" (49-3021), "Bus and Truck Mechanics and Diesel Engine Specialists" (49-3031), and "Electronic Equipment Installers and Repairers, Motor Vehicles" (49-2096).

Examples: Auto Brake Mechanic, Fuel Injection Servicer, Auto Transmission Specialist

SOC Code 49-3031

Name Bus and truck mechanics and diesel engine specialists

Definition

Diagnose, adjust, repair, or overhaul trucks, buses, and all types of diesel engines. Include mechanics working primarily with automobile diesel engines.

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Examples: Tractor Trailer Mechanic, Diesel Mechanic, Farm Equipment Engine Mechanic

SOC Code	Name	Education	Base	Five Year	Job Change	Ind Mix Effect	Nat Gro Effect	Expct Chng	Compet Effect	Earnings Average	Earnings Median
49-3023	Automotive service technicians/mechanics	Postsecondary vocational award	10,378	11,478	1,100	283	712	995	105	\$20.11	\$18.76
49-3031	Bus/truck mechanics diesel engine special	Postsecondary vocational award	3,570	3,852	282	-4	245	241	40	\$20.67	\$20.18
Totals:		13	,948	15,330	1,382						

Job Change: Column represents the addition of new jobs due to growth over the projection period. Indicates how many jobs will be added in the region over the selected time frame.

Industry Mix Effect: Column indicates how many of those jobs are due to movement within the industry at the national level. If the industry is growing across the nation, this is what is expected in the local area.

National Growth Effect: Column shows how the national economy affects the industry or occupation. This operates on the "rising tide carries all ships" assumption. If the economy is doing well, it is expected that this field in the region would benefit from that effect.

Expected Change: Column combines the Industry Mix Effect column and the National Growth Effect column to indicate how much the field is expected to grow in the region, without the input of variables within the economy. This is what is expected to happen if the local economy merely followed national trends.

By netting the Expected Change result out of the Job Change result, the Competitive Effect column shows the jobs that have been added in a field in the region due to growth specific to the region. These are the jobs created locally which aren't merely following national trends. A high Competitive Effect number indicates that the region has found some way to foster growth beyond other regions or even perhaps in spite of decline at the national level.

The following projections are for those occupations most closely associated with this program based on national and regional sources. However, the extent to which specific OCC programs lead to employment within a given Standard Occupational Code (SOC) is dependent upon the way in which the U.S. Department of Labor groups specific occupations.

Occupational projections are presented at the "Detailed Standard Occupational Code" level as defined by the U.S. Department of Labor.

Although based on sound well tested economic modeling procedures, projections are subject to change based on emerging economic, political and social forces.

These projections reflect the four county region of Oakland, Macomb, Livingston and Wayne counties.

Projections are based on data from 24 major data sources, including the U.S. Department of Commerce, Bureau of Labor Statistics (BLS), Internal Revenue Service (IRS), and Census data. To forecast occupational demand at the county level, BLS data are regionalized and adjusted for emerging technological changes, the age of workers by occupation, and other factors affecting occupational demand.

Occupational forecast data was obtained from CCbenefits Inc. Community College Strategic Planner (CCSP).

Oakland Community College Associate Degrees and Certificates Awarded Automobile Servicing 1997-98 through 2006-07



<u>Academic Yr.</u>	<u>Certificates</u>	<u>Associates</u>
1997-98	1	3
1998-99	2	0
1999-00	2	5
2000-01	1	2
2001-02	0	4
2002-03	2	8
2003-04	6	9
2004-05	2	6
2005-06	11	8
2006-07	1	7

Oakland Community College Ten-Year Trend in Student Credit Hours Automobile Servicing 1996-97 through 2006-07

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	1996-97 SCH	1997-98 SCH	1998-99 SCH	1999-00 SCH	2000-01 SCH	2001-02 SCH	2002-03 SCH	2003-04 SCH	2004-05 SCH	2005-06 SCH	2006-07 SCH	% Change	% Change
Automobile Servicing College Wide Totals	1,312 443,471	1,220 431,521	888 440,448	1,076 438,997	904 453,054	1,620 447,928	2,152 478,827	2,440 468,777	2,364 472,892	2,384 487,597	2,360 493,655	45.7 10.2	79.9 11.3
3,000													
											2,384		
2,500 -							2,1	52	2,440	2,364		2,360	
							/						
SI 2,000						1 620							
1,500 -	1,312	,220				1,620							
Studer 1,000 -			888	1,076	904								
500 -													
0	1		,			_,	,		,	,		,	
1	996-97 19	97-98 1	998-99	1999-00	2000-01	2001-0	2 200	2-03 20	003-04	2004-05	2005-06	2006-0	7

Academic Year

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Oakland Community College Program Dashboard Report 2006-07

Automobile Servicing ATA Dashboard Score: 9.69

Benchmarks						
	Current	Trouble	Target	Percent of		Weighted
Measures	Score	Score	Score	Target Achieved	Weight	Score
Sections Filled to Capacity	91.3%	75.0%	90.0%	101.4%	18.0%	1.83
Percent of Completed Sections	79.4%	75.0%	90.0%	88.2%	14.2%	1.25
Credit Hour Trend Ratio	0.95	0.71	1.25	76.0%	15.3%	1.16
Percent of Minority Students	25.1%	16.9%	18.8%	133.5%	6.1%	0.81
Percent of Withdrawals	8.0%	15.0%	0.0%	92.0%	12.0%	1.10
Percent of Incompletes	2.5%	3.0%	0.0%	97.5%	7.9%	0.77
Student Course Completion Rate	78.2%	60.0%	75.0%	104.3%	26.5%	2.76

Oakland Community College Program Dashboard Report 2006-07

Automobile Servicing ATA



Measure

Source: Office of Assessment and Effectiveness Updated On: 10/25/2007

Oakland Community College Program Dashboard Percent of Targets Achieved

The following graph and table depict the extent to which each of the seven Program Dashboard measures met established college-wide benchmarks. Benchmarks (targets and trouble scores) are based on historical data and reflect a range within which each measure is expected to perform.

Measures which exceed the established benchmark are depicted in green, while those that fall short of the benchmark are shown in red. This information is useful in identifying areas of excellence, as well as areas of concern. As a consequence, this report can help to identify specific areas which may require additional attention by program staff.

Student Course Completion Rate

Prefix ATA

Prefix Title Automobile Servicing

	2006-07	2005-06	2004-05	2003-04	
Successful Grades	440	472	511	466	
Total Student Grades	563	646	646	652	
Student Course Completion Rate	78.2%	73.1%	79.1%	71.5%	

Definition:

The percent of students who successfully complete a course with a grade of "C" or higher. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: End of session files, after grades are posted.

Methodology:

Student success rates are based on end of session data after all grades have been posted. Data includes grades from the entire academic year (Summer II, Fall, Winter, and Summer I). The following grades/marks are excluded from the calculation: Audit (AU), Not Attended (N) and Not Reported (NR).



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Percent of Incompletes

Prefix ATA

Prefix Title Automobile Servicing

	2005-06	2005-06	2004-05	2003-04
Total Incompletes	14	24	8	9
Total Grades	563	646	646	652
Percent of Incompletes	2.5%	3.7%	1.2%	1.4%

Definition:

The percent of students who receive an incomplete in their course. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: End of session files, after grades are posted.

Methodology:

Percent of incompletes is derived by dividing the total number of incompletes by the total number of grades and marks awarded throughout the academic year. The Continuous Progress (CP) grade is considered an Incomplete (I). Meanwhile, calculations exclude: Audit (AU), Not Attended (N), and Not Reported (NR).