Manufacturing & Automotive

Automotive Test Technician (APATT) Associate in Applied Science Degree Program Effective Term: Fall 2020

In this program, students will be introduced to the test and data acquisition processes used in automotive testing. Students will learn to assemble and disassemble components for automotive testing. Diagnosis, maintenance and proper operation of complex data acquisition equipment are essential. Students will learn to monitor and calibrate testing instruments. Job possibilities include working in a crash lab or other testing facility.

First Semest	er (15 c	redits)
ASV 131	Automotive Electrical	4
ASV 132	Automotive Engines	4
MTT 102	Machining for the Technologies	2
	Restricted Electives select a minimum of 2 credits: ABR 114 or WAF 105	2
Elective	Writing Elective(s)	3
Second Sem	ester (15 c	redits)
ASV 256	Electrical and Electronic Systems	4
CST 185	Local and Mobile Networking Essentials	4
	Restricted Electives select a minimum of 4 credits: ABR 111, ABR 140, ASV 174, ASV 251, ASV 257, ASV 269, ASV 279, MST 110, MTT 102, or WAF 103	4
Elective	Arts/Human, Elective(s)	3
Third Semes	ter (13 c	redits)
ASV 277	Automotive Powertrain Systems	4
Elective	Math Elective(s)	3
Elective	Speech/Comp. Elective(s)	3
Elective	Nat. Sci. Elective(s)	3
Fourth Seme	ester (17 c	redits)
ABR 201	Lightweighting Composite Repair	4
ASV 270	Automotive Test and Development	4
	Restricted Electives to reach minimum 60 credits: ABR 111, ABR 140, ASV 174, ASV 251, ASV 257, ASV 269, ASV 279, MST 110, MST 220, MTT 102, WAF 103	6
Elective	Soc. Sci. Elective(s)	3
Minimum Cro	edits Required for the Program:	60

Notes:

*Students may elect to take optional courses in Semester 5 to meet MTA. Please refer to the WCC MTA Transfer Agreement web page for more information: http://www.wccnet.edu/services/transferresources/mta/

WASHTENAW COMMUNITY COLLEGE PROGRAM CHANGE OR DISCONTINUATION FORM

Program Code: APATT	Program Name:	Effective Term:
	Automotive Test Technician	Fall 2020
Division Code:	Department:	
АТР	Transportation Technologies	

Directions:

- 1. Attach the current program listing from the WCC catalog or Web site and indicate any changes to be made.
- 2. Draw lines through any text that should be deleted and write in additions. Extensive narrative changes can be included on a separate sheet.
- 3. Check the boxes below for each type of change being proposed. Changes to courses, discontinuing a course, or adding new courses as part of the proposed program change, must be approved separately using a Master Syllabus form, but should be submitted at the same time as the program change form.

Requested Changes:

□ Review X Remove course(s): WAF109, MEC101: WAF 125	 Program admission requirements Continuing eligibility requirements Program outcomes
 Add course(s): <u>WAF103</u> Program title (title was) Description Type of award Advisors Add Niki Lee Articulation information 	 Accreditation information Discontinuation (attach program discontinuation plan that includes transition of students and timetable for phasing out courses) Other

Show all changes on the attached page from the catalog.

Rationale for proposed changes or discontinuation:

MEC 101 and WAF 109 are being removed. MEC 101 is being removed from a restricted electives list. WAF109 is being replaced by WAF105 or ABR114. This change is being made to insure that all students will gain experience with transportation materials processing.

The frequency of each course offering, the time(s) of day each semester, and the alignment of content with expressed employers' skill sets were considered.

Financial/staffing/equipment/space implications: None

List departments that have been consulted regarding their use of this program.

Automotive Body Department (Now Transportation Technologies), Motorcycle Technology Department (Now Transportation Technologies), Industrial Technology Department, Welding and Fabrication Department

Signatures:			
Reviewer	Print Name	Signature	Date
Initiator	Allen Day	Clicit Man	12/12/2019
Department Chair	Allen Day	auntha the	12/12/2019
Division Dean/Administrator	Brandon Tucker	The . m	Wink

Vice President for Instruction	Kimberly Hurns	1 m	INN	//	2	2	2020
President	Rose B. Bellanca		10	V			0.1

Reviewed by C': A Committues 1/23/20

Manufacturing & Automotive

Automotive Test Technician (APATT) Associate in Applied Science Degree Program Effective Term: Fall 2019

In this program, students will be introduced to the test and data acquisition processes used in automotive testing. Students will learn to assemble and disassemble components for automotive testing. Diagnosis, maintenance and proper operation of complex data acquisition equipment are essential. Students will learn to monitor and calibrate testing instruments. Job possibilities include working in a crash lab or other testing facility.

First Semester		(15 credits)
ASV 131	Automotive Electrical	4
ASV 132	Automotive Engines	4
MTT 102	Machining for the Technologies	2
WAF 109	Welding Safety and OSHA Regulations	2
Elective	Writing Elective(s)	3
Second Semest	er	(15 credits)
ASV 256	Electrical and Electronic Systems	4
Flective	Arts/Human, Elective(s)	3
CST 185	Local and Mobile Networking Essentials	4
Elective	Restricted elective(s) select a minimum of 4 credits: ABR 111, ABR 114, ASV 174, ASV 251, ASV 257, 269, ASV 279, MEC 101, MST 110, MTT 102, WAF 105, WAF 125	ASV 4
Third Semester		(13 credits)
ASV 277	Automotive Powertrain Systems	4
Elective	Math Elective(s)	3
Elective	Speech/Comp. Elective(s)	3
Elective	Nat. Sci. Elective(s)	3
Fourth Semeste		(17 credits)
ABR 201	Lightweighting Composite Repair	4
ASV 270	Automotive Test and Development	4
Elective	Soc. Sci. Elective(s)	3
Elective	Restricted elective(s) to reach minimum 60 credits: ABR 111, ABR 114, ASV 174, ASV 251, ASV 257, A 269, ASV 279, MEC 101, MST 110, MTT 102, WAF 105, WAF 125	ASV 6
Minimum Cuadi	to Described for the Drogram	60

Minimum Credits Required for the Program:

Notes:

*Students may elect to take optional courses in Semester 5 to meet MTA. Please refer to the WCC MTA Transfer Agreement web page for more information: http://www.wccnet.edu/services/transferresources/mta/

WASHTENAW COMMUNITY COLLEGE

PROGRAM CHANGE OR DISCONTINUATION FORM

Program Code:	Program Name:
APATT	Automotive Test Technician
Division Code:	Department:
АТР	Automotive Service Department

Effective Term: Fall 2019

Directions:

- 1. Attach the current program listing from the WCC catalog or Web site and indicate any changes to be made.
- 2. Draw lines through any text that should be deleted and write in additions. Extensive narrative changes can be included on a separate sheet.
- 3. Check the boxes below for each type of change being proposed. Changes to courses, discontinuing a course, or adding new courses as part of the proposed program change, must be approved separately using a Master Syllabus form, but should be submitted at the same time as the program change form.

Requested Changes:

□Review

X Remove course(s): <u>MEC 101, WAF 139, ASV 135</u> X Add course(s): <u>WAF 109, CST 185</u> As restricted electives: <u>ASV 174, ASV 257, ASV 269, ASV 279,</u> <u>ABR 111, ABR 114, MST 110, MEC 101, MTT 102, WAF 125</u> □Program title (title was _) □Description □Type of award □Advisors Drogram admission requirements

□Continuing eligibility requirements □ Program outcomes □Accreditation information

 Discontinuation (attach program discontinuation plan that includes transition of students and timetable for phasing out courses)
 Other

 \Box Articulation information

Show all changes on the attached page from the catalog.

Rationale for proposed changes or discontinuation:

MEC 101, WAF 139, ASV 135 are being removed. Those courses are being replaced with WAF 109, CST 185, and restricted electives. Program goals and employer alignment were better improved with the addition of the new course and the updated restricted electives. WAF 109, a new course has safety content from ASV135, and is a prerequisite for other restricted elective WAF courses. CST 185 was added as a required course in collaboration with the Computer Instruction Department to add new content to this program to align with the technological advances in the target career path.

The frequency of each course offering, the time(s) of day each semester, and the alignment of content with expressed employer's skill sets were considered. Prerequisites were also reviewed, and the courses were chosen to limit registration restrictions that always require overrides. Department Chair of each department was consulted to consider prerequisite updates to avoid automatic unneeded overrides for registration.

Financial/staffing/equipment/space implications: None

List departments that have been consulted regarding their use of this program. Automotive Body Department, Motorcycle Technology Department, Industrial Technology Department, Computer Instruction Department, Welding and Fabrication Department

Signatures:	Lucany	& isa vean	4/11/19				
Reviewer	Print Name	Signature	Date				
Initiator	Allen Day	ally Michy	11/19/2018				
Department Chair	Justin Morningstar	alla of	11/19/2018				
Division Dean/Administrator	Brandon Tucker	1Pho-	11/21/8				
Vice President for Instruction	KIMBERLY HUMANS	Km/Van /	11/28/1B				
President	Rose BBulance	1 Radispellinen	118/19'				
Do not write in shaded area. Entered in: Banner C&A Database 4/12/19 Log File 4/12/19 Board Approval							
Please submit completed form to the	e Office of Curriculum and Asse	ssment (SC 257).					

٦

WCC General Education Requirements Effective Fall 2018

Associate degree programs were updated to meet the revised WCC general education requirements below.

Course Distribution Requirements

Associate degree students must complete courses from each of six General Education content areas. The requirements vary, depending on which degree is being earned. The number of general education credit hours required for each degree is as follows.

	AA	AS	AAS
Writing/Composition	3-4 credits	3-4 credits	3-4 credits
2nd Writing/Composition or Communication	3-4 credits	3 credits	3 credits
Mathematics	3-4 credits	3-4 credits	3-4 credits
Natural Sciences ¹	7-8 credits	7-8 credits	3-4 credits
Social & Behavioral Science ²	6 credits	6 credits	3 credits
Arts and Humanities ³	6 credits	6 credits	3 credits
General Education Electives to reach 30 credits	0-2 credits	0-2 credits	N/A
Minimum	30 credits	30 credits	18 credits

¹ Two courses in Natural Science including one with laboratory experience (from two disciplines)

² From two disciplines

³ From two disciplines

Automotive Test Technician (APATT) Associate in Applied Science Degree Program Effective Term: Fall 2018

In this program, students will be introduced to the test and data acquisition processes used in automotive testing. Students will learn to assemble and disassemble components for automotive testing. Diagnosis, maintenance and proper operation of complex data acquisition equipment are essential. Students will learn to monitor and calibrate testing instruments. Job possibilities include working in a crash lab or other testing facility.

First Semes	ter	(15 credits)
ASV 131	Automotive Electrical	4
ASV 132	Automotive Engines	4
MTT 102	Machining for the Technologies	2
WAF 105	Introduction to Welding Processes	2
Elective	Writing Elective(s)	3
Second Sem	iester	(15 credits)
ASV 135	Facility Operations	3
ASV 256	Electrical and Electronic Systems	4
MEC 101	3D Modeling and Blueprint Reading	2
Elective	Arts/Human, Elective(s)	3
Elective	Elective(s) to reach minimum 60 credits	3
Third Semes	ster	(13 credits)
ASV 277	Automotive Powertrain Systems	4
WAF 139	Basic Metal Fabrication	3
Elective	Math Elective(s)	3
Elective	Speech/Comp. Elective(s)	3
Fourth Semi	ester	(17 credits)
ASV 270	Automotive Test and Development	4
ABR 201	Lightweighting Composite Repair	4
Elective	Nat, Sci. Elective(s)	3
Elective	Soc. Sci. Elective(s)	3
Elective	Elective(s) credits to reach a minimum of 60 credits	3
Minimum Cr	edits Required for the Program:	60

Notes:

*Students may elect to take optional courses in Semester 5 to meet MTA. Please refer to the WCC MTA Transfer Agreement web page for more information: http://www.wccnet.edu/services/transferresources/mta/

Done 1/12/18

WASHTENAW COMMUNITY COLLEGE

GENERAL EDUCATION REVISION AAS PROGRAM CHANGE FORM 2018-2019

Program Code:	Program Name:
APTI TI	Automotive lest lechnician
Division Code:	Department:
AIP	A

This form is to be used only for General Education Revision Program Changes for Associate in Applied Science (AAS) programs. Any other program changes should be submitted separately using a standard Program Change Form. Directions:

- 1. Review each general education area under **Requested Changes** below and respond as needed.
- 2. Attach the semester program layout showing the current program listing from the WCC catalog.
 - a. Indicate any changes to be made on the semester layout.
 - b. Draw a line through any courses that should be removed on the semester layout.
 - c. Write in any courses that need to be added on the semester layout.
- 3. Submit this form and semester program layout to the Office of Curriculum and Assessment (SC 257).

Current General Education Requirements AAS		Revised General Education Requirements 2018-2019 AAS		
Writing	3-4 credits	English Composition	3 - 4 credits	
Speech Mathematics	3 credits 3 - 4 credits	2 nd Course in English Composition or one course in Communication	3 - 4 credits	
Natural Sciences	3 - 4 credits	Mathematics	3 - 4 credits	
Social & Behavioral Sciences	3 credits	Natural Sciences	3 - 5 credits	
Arts & Humanities	3 credits	Social & Behavioral Sciences	3 credits	
Critical Thinking	0 credits	Arts & Humanities from	3 credits	
Computer & Information Literacy	3 credits	Total	18 credits	
Total	21-24 credits			

Please review each General Education Area in the chart below, and record the needed changes in the chart and on the attached semester program layout.

Gener	al Education Area
Englisl change	n Composition – The requirement for one writing/English composition course remains the same. No es will be made unless specifically requested below. (Use Writing Elective or ENG 111)
Optior	nal Change:
2 nd Co	urse in English Composition or one course in Communication
WCC p	previously required both a second composition/writing course and a communication course. Your
1.	Allow students to select any course that meets composition/writing or communication (recommended).
	Require students to take a specific composition course (identify course below and on semester layout
2.	instance of a constance of the source (identify course below and on semester in your

Mathematics – The requirement for one mathematics course remains the same. However, the courses that meet the MTA requirement have changed slightly. See the course listing for details
Optional Change: NC
Natural Sciences - The requirement for one natural science course remains the same. No changes will be made unless specifically requested below.
Optional Change: NC
Social & Behavioral Sciences – The requirement for one social and behavioral science course remains the same. No changes will be made unless specifically requested below.
Optional Change:
Arts & Humanities – The requirement for one arts and humanities course remains the same. No changes will be made unless specifically requested below. (Note: A department can designate a COM course as a requirement here. The same course cannot be counted in two areas.)
Optional Change: NC
 Computer and Information Literacy The requirement for computer and information literacy has been removed. Your options are: Continue to require a specific computer course. If a specific course is required in your program, we wil leave it there. If you previously used "Computer and Information Literacy Course," you will need to specify either a specific course or a list of courses from which to choose.

Reviewer	Print Name	Signature	Date
Initiator	ALLEN DON	Open B	17/12/2017
Department Chair	Justin Moundar	Halles	12/12/17
Division Dean/Administrator	Brandin Tudier	The	12/11/12
Vice President for Instruction			1910
	-	m fit	11.1.1.10
Office use only	v		
Entered in: 🖾 Banner 🖾 C	&A Database 🛛 Log File		

1

APATT

School of Automotive and Motorcycle Technology

If you are looking for the best technical training in the automotive or motorcycle field, WCC's School of Automotive and Motorcycle Technology is the place for you. Whether your focus is finding employment as a technician, learning about performance equipment, or creating a custom look, our introductory and advanced certificate programs, as well as associate degrees, will enhance your personal and professional qualifications. These programs offer the perfect blend of classroom and hands-on education not available in many other educational settings.

Washtenaw Community College offers programs at several levels for students who want to begin new careers, or advance in their existing careers. The first level is the certificate, which can vary from nine to thirty-six credits, depending on the field. Certificates generally prepare students for entry-level jobs.

After completing a certificate, students can progress to the next level, the advanced certificate. The credit hours required for these programs also vary. This type of certificate provides a more specialized level of skill development, and often allows students to upgrade their positions at their places of employment.

The next level, an Associate in Applied Science, is available for some programs. For some career fields, it is possible to earn a certificate, advanced certificate (if one exists), and an Associate in Applied Science degree in the same field. In these cases, the credit hours from the certificate and advanced certificate can be applied to the credit hours needed for the Associate in Applied Science degree.

Alternatively, students can earn an AAS in Occupational Studies by completing a certificate, advanced certificate and General Education requirements.

Automotive Services

The automotive certificate prepares the student for work as an automotive services technician, diagnosing and repairing malfunctions in automobile systems.

Automotive Test Technician (APATT) Associate in Applied Science Degree Program Effective Term: Fall 2015

In this program, students will be introduced to the test and data acquisition processes used in automotive testing. Students will learn to assemble and disassemble components for automotive testing. Diagnosis, maintenance and proper operation of complex data acquisition equipment are essential. Students will learn to monitor and calibrate testing instruments. Job possibilities include working in a crash lab or other testing facility.

First Semester ASV 131 ASV 132 MTT 102 WAF 105 Elective	Automotive Electrical Automotive Engines Machining for Auto Applications Introduction to Welding Processes Writing Elective(s)	4 4 2 2 3-4
Second Semes ASV 135 ASV 256 MEC 101 Elective Elective	Facility Operations Electrical and Electronic Systems 3D Modeling and Blueprint Reading Arts/Human. Elective(s) Computer Lit. Elective(s)	3 4 2 3 3
ASV 277 WAF 200 Elective Elective	Automotive Powertrain Systems Layout Theory Welding Math Elective(s) Speech Elective(s)	4 3 4 3
Fourth Semesta ASV 270 ATT 203 Elective Elective Elective Elective	Automotive Test and Development Lightening Materials in Transportation Nat. Sci. Elective(S) Soc. Sci. Elective(s) Elective(s) credits to reach a minimum of 60 credits	4 3 4 3 2
Minimum Credi	ts Required for the Program:	60

Notes:

*Students may elect to take the following optional courses in Semester 5 to meet MTA:

-Arts and Humanities Elective (3 credits)

-Natural Science Elective (3-4 credits)

-Social Science Elective (3 credits)

PROGRAM PROPOSAL FORM

- **Preliminary Approval –** Check here when using this form for preliminary approval of a program proposal, and respond to the items in general terms.
- Final Approval Check here when completing this form after the Vice President for Instruction has given preliminary approval to a program proposal. For final approval, complete information must be provided for each item.

Program Name:	Automotive Test Technician		
Division and Department:	ATP AUTD		
Type of Award:	□ AA □ AS ⊠ AAS □ Cert. □ Adv. Cert. □ Post-Assoc. Cert. □ Cert. of Comp.		
Effective Term/Year:	Fall 2015	i de la companya de La companya de la comp	
Initiator:	Allen Day		
Program FeaturesProgram's purpose and its goals.Criteria for entry into the program, along with projected enrollment figures.Connection to other WCC programs, as well as accrediting agencies or professional organizations.Special features of the program.Need	This program is being developed in coordination with the Skilled Trades Equipment grant. In this program, student will develop a technical background in both automotive component testing and defect analysis based on data acquisition. The student will gain experience in developing and validating engine and automotive component testing systems. Pre-production testing of components occurs before the engine is put together. Topics covered include fuel mapping and thermal efficiency. This program utilizes some existing courses from the automotive services (APASRV) associate degree program to provide the background for testing automotive components. Much of the work takes place in crash labs and other testing facilities.		
Need for the program with evidence to support the stated need.	a result of round table discussion with industry leaders. Three local employers, Toyota (Testing Center), Roush Industries and Ford Testing in Allen Park, who participated in the round table discussion, identified openings in automotive testing labs. These employers were able to identify the key knowledge and skills needed for students to be successful in this career field.		
Program Outcomes/Assessment	<u>Outcomes</u>	Assessment method 1 ASV 270 Departmental Exam	
State the knowledge to be gained, skills to be learned, and attitudes to be developed by students in the program.	 a Develop and complete an automotive testing sequence used in automotive part defect mapping. Acquire, analyze and interpret test data. 	2. ASV 270 Departmental Exam	
Include assessment methods that will be used to determine the effectiveness of the program.	3. Recognize and appropriately use advanced, lightweight automotive materials	3. ATE 203 Departmental Exam	

Mo Logged 1/2/15 si dore 5/13/15 mis Office of Curriculum & Assessment

Program Proposal Form 8-2005

Curriculum	Semester 1		15 - 16 Credits	
	Writing Elective		3-4 cr	
List the courses in the program as they should	MTT 102	Machining for Auto Applications	2 cr	
appear in the catalog. List minimum credits	ASV 131	Automotive Electrical	4 cr	
required. Include any notes that should appear	ASV 132	Automotive Engines	<u>4 cr</u>	
below the course list.	WAF 105	Introduction to Welding Processes	2 cr	
	Samastar 2		15 Credite	
	Semester 2		15 Credits	
	MEC 101	Modeling and Bluenrint Reading	2 cr	
	ASV 135	Facility Operations	3 cr	
	ASV 256	Electrical and Electronic Systems	4 cr	
	Humanities Elective	Brownian and Brownian Bysterns	3 cr	
	Semester 3		14 Credits	
	Speech Elective		3 cr	
	Math Elective		4 cr	
	WAF 200	Layout/Fabrication for AMC (override) 3 cr	
	ASV 277	Automotive Powertrain Systems	4 cr	
	Semester 4		15-16 credits	
	Physical Science Elective		<u>4 cr</u>	
	Social Science Elective		<u>3 cr</u>	
4.7.7	ASV 270	Auto Test & Development	4 cr	
A11	ATC 203	Lightweight Materials in Transportatio	n <u>3 cr</u>	
	Elective Credits	to reach a minimum of 60 credits	1-2 cf	
	Total Program Credits		60	
	Sumator 5 Octional		0.10	
	Semester 5 – Optional		9-10	
	Social Science Elective		3 cr	
	Humanities Elective		3 cr	
	Physical Science Elective		3-4 cr	
	Total Program Credits		69 - 70	
2010 C				
Budget		START-UP COSTS	ONGOING COSTS	
Specify program costs in the following	Faculty	e l	Future FT Instructor	
areas, per academic year:	raculty		Future FT Instructor	
,	Training/Travel	•	•	
	Materials/Resources		\$600.00	
	Facilities/Equipment	\$358,644.50*	\$2500.00 .5 FTE	
	Classified Faculty			
	TOTALS	\$358,644.50*	¢ TPD	
	Potential Skilled Trades Equ	ipment grant funding*	<u>, 150</u>	
Program Description for Catalog and Web site	In this program, students will be introduced to the test and data acquisition processes used in automotive testing. Students will learn to assemble and disassemble components for automotive testing. Diagnosis, maintenance, and proper operation of complex data acquisition equipment are essential. Students will learn to monitor and calibrate testing instruments. Job possibilities including working in a crash lab or other testing facility.			

Program Information	Accreditation/Licensure – ASE Tests
	Advisors - TBD
	Advisory Committee – In Development
	Admission requirements -
	Articulation agreements - TBD
	Continuing eligibility requirements -

Assessment plan:

Program outcomes to be assessed	Assessment tool	When assessment will take place	Courses/other populations	Number students to be assessed
Develop and complete an automotive testing sequence used in automotive part defect mapping.	ASV 270 Departmental Exam	Fall 2018	All sections of ASV 270	All students
Acquire, analyze and interpret test data.	ASV 270 Departmental Exam	Fall 2018	All sections of ASV 270	All students
Recognize and use advanced, lightweight AT automotive materials.	T ATC 203 Departmental Exam	Fall 2018	All sections of ATC 203 ATT	All students

Scoring and analysis plan:

1. Indicate how the above assessment(s) will be scored and evaluated (e.g. departmentally-developed rubric, external evaluation, other). Attach the rubric.

Exams will be scored using a departmentally-developed rubric and an answer key

2. Indicate the standard of success to be used for this assessment.

75% of the students will score 70% or higher.

3. Indicate who will score and analyze the data.

Departmental faculty will analyze the data.

REVIEWER	PRINT NAME	SIGNATURE	DATE
Department Chair/Area Director	Allen Day	allem 11. Su	01/08/2015
Dean	Brandon Tucker	ARE'	1/9/15
Vice President for Instruction			
Approved for Development			alasta
Final Approval	William Abernethy	A Park	44315
President	Rose Bellanca	Bellance	2/23/6
Board Approval			3/24/15

Office of Curriculum & Assessment

Program Proposal Form 8-2005