

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.

<p>Program Name:</p> <p>Division and Department:</p> <p>Type of Award:</p> <p>Effective Term/Year:</p> <p>Initiator:</p>	<p><u>Powertrain Development Technician (APPDT)</u></p> <p><u>ATP/ AUTD</u></p> <p> <input type="checkbox"/> AA <input type="checkbox"/> AS <input checked="" type="checkbox"/> AAS <input type="checkbox"/> Cert. <input type="checkbox"/> Adv. Cert. <input type="checkbox"/> Post-Assoc. Cert. <input type="checkbox"/> Cert. of Comp. </p> <p><u>Fall 2015</u></p> <p><u>Allen Day</u></p>	
<p>Program Features Program's purpose and its goals.</p> <p>Criteria for entry into the program, along with projected enrollment figures.</p> <p>Connection to other WCC programs, as well as accrediting agencies or professional organizations.</p> <p>Special features of the program.</p>	<p>This program is being developed in coordination with the Skilled Trades Equipment grant. In this program, students will develop the knowledge and skills to perform automotive powertrain testing in a unique testing environment. Jobs in this area require experience with an automotive dynamometer.</p> <p>This program utilizes some existing courses from the automotive services (APASRV) associate degree program to provide the background for testing and development of powertrains. While the APASRV program goes on to review all components of a car, this program focuses on engines, drivetrains and electrical systems.</p> <p>This program would require the purchase of an automotive dynamometer.</p>	
<p>Need</p> <p>Need for the program with evidence to support the stated need.</p>	<p>This program is developed in coordination with the Skilled Trades Equipment grant and as a result of round table discussions with industry leaders. Three local employers, GM Powertrain, Detroit Diesel and Thompson Automotive, who participated in the round table discussion, identified immediate openings in the field of powertrain development technician. Students would work in an engineering powertrain testing lab or an engineering powertrain endurance testing lab setting up tests, running them using a dynamometer and assisting with interpretation of results.</p>	
<p>Program Outcomes/Assessment</p> <p>State the knowledge to be gained, skills to be learned, and attitudes to be developed by students in the program.</p> <p>Include assessment methods that will be used to determine the effectiveness of the program.</p>	<p><u>Outcomes</u></p> <ol style="list-style-type: none"> 1. Assemble dyno test cell to run engine and powertrain components. 2. Retrieve and analyze complex test data. 3. Interpret test data and recommend corrective action. 	<p><u>Assessment method</u></p> <ol style="list-style-type: none"> 1. Departmental Exam 2. Departmental Exam 3. Departmental Exam

MO Done 4/25/15 mo
 logged 1/14/15 sj
 Office of Curriculum & Assessment

Curriculum List the courses in the program as they should appear in the catalog. List minimum credits required. Include any notes that should appear below the course list.	Semester 1		15 - 16 Credits
	Writing Elective		3 - 4 cr
	MTT 102	Machining for Auto Applications	2 cr
	ASV 131	Automotive Electrical	4 cr
	ASV 132	Automotive Engines	4 cr
	WAF 105	Introduction to Welding Processes	2 cr
	Semester 2		15 Credits 16 cr
	Computer Literacy		3 cr
	MEC 101	Modeling and Blueprint Reading	2 cr
	WAF 106	Blueprint Reading for Welders	2 cr 3 cr
	ASV 256	Electrical and Electronic Systems	4 cr
	Natural Science Elective		4 cr
	Semester 3		15 Credits
	Math Elective		4 cr
	WAF 200	Layout/Fabrication for AMC	3 cr
	ASV 277	Automotive Powertrain Systems	4 cr
	ASV 279	Auto Dynamometer and Testing	4 cr
	Semester 4		16 credits
	Social Science Elective		3 cr
	Speech Elective		3 cr
	Humanities Elective		3 cr
	ASV 135	Facility Operations	3 cr
	MST 220	Dynamometer Operations (override)	4 cr
	Total Program Credits		61 62
	Semester 5 – Optional Courses to meet MTA		9 – 10
	Social Science Elective		3 cr
	Humanities Elective		3 cr
Physical Science Elective		3 – 4 cr	
Total Program Credits		70 - 72	
Budget Specify program costs in the following areas, per academic year:	START-UP COSTS		ONGOING COSTS
	Faculty	\$.	Future FT Instructor
	Training/Travel	.	.
	Materials/Resources	.	\$600.00
	Facilities/Equipment	\$374,749.00*	\$2500.00
	Classified Faculty	.	.5 FTE
	TOTALS:	\$374,749.00*	\$ TBD
Potential Skilled Trades Equipment grant funding* Funding overlaps slightly with Automotive Test Technician program proposal.			

Program Description for Catalog and Web site	In this program, students will develop the knowledge and skills to perform in-car powertrain testing in unique testing environments. Jobs in this area require knowledge of automotive engine and electrical systems and experience with an automotive dynamometer. Students will learn about dynamometer setup and testing including the operation of complex analytical test equipment and test software.
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
Assemble dyno test cell to run engine and powertrain components.	Departmental Exam	Fall 2018	ASV 279	All students
Retrieve and analyze complex test data	Departmental Exam	Fall 2018	ASV 279	All students
Interpret test data and recommend corrective action.	Departmental Exam	Fall 2018	ASV 279	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.

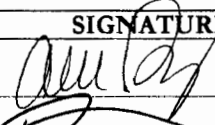


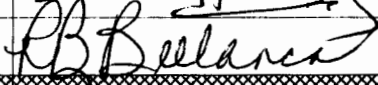
Departmentally-developed rubric and answer key

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		1/14/2015
Dean	Brandon Tucker		1/14/15
Vice President for Instruction <input type="checkbox"/> Approved for Development <input type="checkbox"/> Final Approval	William Abernethy		2/23/15
President	Rose Bellanca		2/23/15
Board Approval			3/24/15