

# POWERTRAIN DEVELOPMENT TECHNICIAN (AAS)

**Catalog Effective Term:** Fall 2024

**Program Code:** APPDT

**Credential:** Associate in Applied Science

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.

**Minimum Credits Required for the Program: 61**

## Full-Time students

*Students may elect to take optional courses in Semester 5 to meet MTA.*

*Please refer to the WCC MTA Transfer Agreement web page <http://www.wccnet.edu/learn/transfer-wcc-credits/mta.php> for more information.*

Course	Title	Credits
<b>First Semester</b>		
ABR 114	Applied Auto Body Welding	2
ASV 130	Automotive Maintenance	4
ASV 131	Automotive Electrical	4
Writing Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#writing">https://coursecatalog.wccnet.edu/academics/general-education/#writing</a> )		3
<b>Credits</b>		<b>13</b>
<b>Second Semester</b>		
ABR 140	Aluminum Welding for Automotive Applications	4
ASV 132	Automotive Engines	4
ASV 256	Electrical and Electronic Systems	4
Math Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#math">https://coursecatalog.wccnet.edu/academics/general-education/#math</a> )		3
<b>Credits</b>		<b>15</b>
<b>Third Semester</b>		
ASV 277	Automotive Powertrain Systems	4
MST 220	Dynamometer Operations	4
Soc. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#soctbehavsci">https://coursecatalog.wccnet.edu/academics/general-education/#soctbehavsci</a> )		3
Speech/Comp. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#writing">https://coursecatalog.wccnet.edu/academics/general-education/#writing</a> )		3
APPDT Restricted Elective(s) (p. 2)		2
<b>Credits</b>		<b>16</b>
<b>Fourth Semester</b>		
ASV 279	Automotive Dynamometer and Test	4
MST 230	Advanced Motorcycle Fabrication	3
Arts/Human. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#arthuma">https://coursecatalog.wccnet.edu/academics/general-education/#arthuma</a> )		3
Nat. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci">https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci</a> )		3

APPDT Restricted Elective(s) (p. 2)	4
<b>Credits</b>	<b>17</b>
<b>Total Credits</b>	<b>61</b>

## Part-Time students

*Students may elect to take optional courses to meet MTA. Please refer to the WCC MTA Transfer Agreement web page <http://www.wccnet.edu/learn/transfer-wcc-credits/mta.php> for more information.*

Course	Title	Credits
<b>First Semester</b>		
ASV 130	Automotive Maintenance	4
ASV 131	Automotive Electrical	4
<b>Credits</b>		<b>8</b>
<b>Second Semester</b>		
ASV 132	Automotive Engines	4
ASV 256	Electrical and Electronic Systems	4
<b>Credits</b>		<b>8</b>
<b>Third Semester</b>		
Math Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#math">https://coursecatalog.wccnet.edu/academics/general-education/#math</a> )		3
Writing Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#writing">https://coursecatalog.wccnet.edu/academics/general-education/#writing</a> )		3
<b>Credits</b>		<b>6</b>
<b>Fourth Semester</b>		
ABR 114	Applied Auto Body Welding	2
ASV 277	Automotive Powertrain Systems	4
<b>Credits</b>		<b>6</b>
<b>Fifth Semester</b>		
ABR 140	Aluminum Welding for Automotive Applications	4
ASV 279	Automotive Dynamometer and Test	4
<b>Credits</b>		<b>8</b>
<b>Sixth Semester</b>		
Nat. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci">https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci</a> )		3
Speech/Comp. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#writing">https://coursecatalog.wccnet.edu/academics/general-education/#writing</a> )		3
<b>Credits</b>		<b>6</b>
<b>Seventh Semester</b>		
MST 220	Dynamometer Operations	4
APPDT Restricted Elective(s) (p. 2)		2
<b>Credits</b>		<b>6</b>
<b>Eighth Semester</b>		
MST 230	Advanced Motorcycle Fabrication	3
Soc. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#soctbehavsci">https://coursecatalog.wccnet.edu/academics/general-education/#soctbehavsci</a> )		3
<b>Credits</b>		<b>6</b>
<b>Ninth Semester</b>		
Arts/Human. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#arthuma">https://coursecatalog.wccnet.edu/academics/general-education/#arthuma</a> )		3

APPDT Restricted Elective(s) (p. 2)	4
<b>Credits</b>	<b>7</b>
<b>Total Credits</b>	<b>61</b>

### APPDT Restricted Electives

Code	Title	Credits
ABR 111	Introduction to Auto Body Repair	4
ASV 135	Facility Operations	3
ASV 174	ASV Co-op Education I	1-3
ASV 257	Heating and Air Conditioning Systems	2
ASV 266	Advanced Transmissions	2
ASV 274	ASV Co-op Education II	1-3
CSS 200	Introduction to Network Security - Security +	4
CSS 205	Essentials of Network Penetration Testing	4
CST 185	Local and Mobile Networking Essentials	4
MST 110	Motorcycle Service Technology I	4