

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

| | |
|-------------------------------------|-----------|
| APPDT Restricted Elective(s) (p. 2) | 4 |
| Credits | 17 |
| Total Credits | 61 |

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

| | |
|-------------------------------------|-----------|
| APPDT Restricted Elective(s) (p. 2) | 4 |
| Credits | 7 |
| Total Credits | 61 |

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 |