

# Diesel Technology

The diesel technology programs teach students the basic knowledge and skills needed to service and repair diesel and gas-powered equipment. In addition to classroom study, students receive over 1,000 hours of lab training and 480 hours of actual experience through the summer cooperative internship program. Students learn to repair and test diesel fuel systems, engines, hydraulic systems, electronic control systems, power trains, brakes, electrical systems, suspension, and air conditioning systems, as well as gaining experience with various hand tools and test equipment. Related courses in math, computers, communications, human relations, and personal and business finance are included to prepare students for the world of work and to enhance technical skills.

Northeast Community College and Wayne State College have an agreement that Wayne State will accept up to 66 credit hours from Northeast toward a bachelor of science degree in technology. (Enrollment into either of these programs is limited and is based on the date of application.)

## Required Program of Study for Associate of Applied Science Degree (2 years) Agriculture Option

### Freshman Year

| FIRST SEMESTER                               |         |
|--|---------|
| Course                                       | Credits |
| DESL 1010 Ag Electrical Systems Theory ..... | 3       |
| DESL 1020 Ag Electrical Systems Lab.....     | 5.5     |
| DESL 1050 Ag Air Conditioning Theory.....    | 2       |
| DESL 1060 Ag Air Conditioning Lab.....       | 3.5     |
| INFO 1000 Basic Computer Applications .....  | 2       |
| MATH 1030 Applied Mathematics I.....         | 2       |
|  | 18      |

| SECOND SEMESTER                           |         |
|---|---------|
| Course                                    | Credits |
| DESL 1030 Ag Power Trains Theory.....     | 3       |
| DESL 1040 Ag Power Trains Lab.....        | 5.5     |
| DESL 1070 Farm Machines Theory.....       | 2       |
| DESL 1080 Farm Machines Lab.....          | 3.5     |
| DESL 1290 Job Search and Employment ..... | 1       |
| MATH 1050 Applied Mathematics II.....     | 2       |
| WELD 1010 Related Welding .....           | 0.5     |
| WELD 1020 Related Welding Lab.....        | 1       |
|   | 18.5    |

| REQUIRED SUMMER: 12 weeks               |   |
|---|---|
| DESL 1300 Cooperative Internship I..... | 8 |

### Sophomore Year

| FIRST SEMESTER                               |         |
|--|---------|
| Course                                       | Credits |
| DESL 2010 Ag Electronics Theory .....        | 2       |
| DESL 2020 Ag Electronics Lab .....           | 3.5     |
| DESL 2070 Hydraulics Theory .....            | 3       |
| DESL 2080 Hydraulics Lab .....               | 5.5     |
| ECON 1010 Personal and Business Finance..... | 2       |
| PSYC 1000 Human Relations .....              | 2       |
|  | 18      |

| SECOND SEMESTER                                   |         |
|---|---------|
| Course  | Credits |
| DESL 2030 Ag Engines and Fuel Systems Theory..... | 5       |
| DESL 2040 Ag Engines and Fuel Systems Lab.....    | 9       |
| ENGL 1050 Career Composition.....                 | 3       |
|   | 17      |

**Total Credit Hours** **79.5**

## Required Program of Study for Associate of Applied Science Degree (2 years) Truck Option

### Freshman Year

| FIRST SEMESTER   |         |
|--|---------|
| Course   | Credits |
| DESL 1130 Truck Power Trains Theory .....              | 3       |
| DESL 1140 Truck Power Trains Lab.....                  | 5.5     |
| DESL 1170 Air Brakes & Suspension Systems Theory ..... | 2       |
| DESL 1180 Air Brakes & Suspension Systems Lab .....    | 3.5     |
| INFO 1000 Basic Computer Applications .....            | 2       |
| MATH 1030 Applied Mathematics I.....                   | 2       |
|  | 18      |

| SECOND SEMESTER                                 |         |
|---|---------|
| Course  | Credits |
| DESL 1110 Truck Electrical Systems Theory ..... | 3       |
| DESL 1120 Truck Electrical Systems Lab .....    | 5.5     |
| DESL 1150 Truck Air Conditioning Theory .....   | 2       |
| DESL 1160 Truck Air Conditioning Lab.....       | 3.5     |
| DESL 1290 Job Search and Employment .....       | 1       |
| MATH 1050 Applied Mathematics II.....           | 2       |
| WELD 1010 Related Welding .....                 | 0.5     |
| WELD 1020 Related Welding Lab.....              | 1       |
|   | 18.5    |

| REQUIRED SUMMER: 12 weeks               |   |
|---|---|
| DESL 1300 Cooperative Internship I..... | 8 |

### Sophomore Year

| FIRST SEMESTER  |         |
|---|---------|
| Course  | Credits |
| DESL 2130 Truck Engines and Fuel Systems Theory ..... | 5       |
| DESL 2140 Truck Engines and Fuel Systems Lab.....     | 9       |
| ECON 1010 Personal and Business Finance.....          | 2       |
| PSYC 1000 Human Relations .....                       | 2       |
|   | 18      |

| SECOND SEMESTER  |         |
|--|---------|
| Course   | Credits |
| DESL 2110 Diesel Truck Electronics Theory .....                | 2       |
| DESL 2120 Diesel Truck Electronics Lab .....                   | 3.5     |
| DESL 2170 Transportation Refrigeration<br>and ASE Theory ..... | 3       |
| DESL 2180 Transportation Refrigeration and ASE Lab .....       | 5.5     |
| ENGL 1050 Career Composition.....                              | 3       |
|  | 17      |

**Total Credit Hours** **79.5**