

Diesel Technology: Field Maintenance

Our Diesel Technology programs offer a unique, hands-on technology education recognized by industry leaders as on the nation's leading diesel programs. Our curriculum is relevant to students' lives and careers, valuable in terms of content and competencies and connected to the needs of industry. It strives to provide an environment that fosters excellence in learning and one that nurtures discovery of knowledge for advancement, academic excellence in the classroom, and personal growth through collaboration and teamwork.

Mission Statement

The mission of the Diesel Technology program is to provide students with the working knowledge, technological proficiency, and professional skills necessary to be successful in a variety of careers related to diesel technology. Our faculty instructors and cutting-edge Diesel Technology Center provide students a unique opportunity to gain hands-on and technology-driven educational experiences that reflect industry standards and expectations.

Learning Outcomes for Diesel Technology Field Maintenance, BS

Upon completion of this program, students will be able to, in accordance with industry standards:

- Apply advanced diagnostic and repair procedures for machine systems and components.
- Apply advanced diagnostic and repair procedures for hydraulic systems.
- Perform advanced welding processes appropriate to field maintenance.
- Use computer-based resources to diagnose and repair on and off-highway equipment.
- Use diagnostic devices to communicate with equipment and machine controllers.
- Work within current industry safety guidelines and standards to ensure a safe working environment.
- Use written communication to analyze and convey information in a clear, concise, and professional manner.
- Use verbal communication and visual aids to convey information to an audience in an effective, professional manner.

Bachelor of Science Diesel Technology: Field Maintenance Option

Learning Outcomes: Demonstrate the effectiveness of incorporating computer based testing with the B.S. Diesel Technology - Field Maintenance program. The student will successfully complete selected weld performance certifications. Successful completion and submission of electronic work-orders.

Required Courses

Code	Title	Credits
General Education Core (https://catalognow.msun.edu/general-education-core/general-education-core/) ¹		33
Required Courses		
DST 115	Intro to Diesel Fuel Systems	5
DST 216	Heavy Duty Power Trains	4
WLDG 110	Welding Theory I	2
WLDG 111	Welding Theory I Practical	2
COMX 111 or COMX 115	Intro to Public Speaking (Meets CAT I Requirement) Intro to Interpersonal Communc	3
ATDI 265	Heating and Air Conditioning	4
DST 104	Intro to Diesel Engines	3
DST 114	Intro to Diesel Engines Lab	3
Any Category II: Mathematics		3
WLDG 114	Mig/Tig Welding	3
ATDI 134	Electrical/Electronic Sys I	6
DST 204	Intro to Hydraulics Pneumatics	2
DST 214	Intro to Hydr Pneumatics Lab	2
DST 264	Diesel Engine Diagnosis Repair	3

DST 274	Diag Diesel Engine Repair Lab	3
ATDI 264	Electrical/Electronic Sys II	6
WLDG 260	Repair & Maintenance Welding	3
Any Category IV: Social Science/History		6
Any Category VII: Technology		3
ATDI 384	AT/DI Elctrc/Elctrn Sys III	4
MCH 200	Machining	3
Any Category III: Natural Science		3
Any Category VI: Humanities/Fine Arts		6
DST 314	Hydraulics and Pneumatics II	4
TSCI 304	Fuels and Lubricants (Meets CAT III w/ Lab Requirement)	3
WLDG 186	Welding Qual Test Prep w/Lab	3
WRIT 350	Technical Editing (Meets CAT I Requirement)	3
ATDI 400	Shop Procedures	3
DST 440	Advanced Fuel Systems	4
WLDG 356	Welding Certifctn Procdrs II	3
Any Category V: Cultural Diversity		3
DST 434	Current Model Year Technology (Capstone)	3
DST 450	Diag Pwr Shifts and HD Atmtics	4
WLDG 357	Welding Certifctn Procdrs III	3
DST 498	Cooperative Education	2
Total minimum credits required for degree		120

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Please Note: *In addition to WRIT 350 and TSCI 304, four (4) credits of the General Education Core must be at the upper division level.*