Diesel/Heavy Equipment Technology - AAS

2022-23

Program map for Diesel/Heavy Equipment Technology Associate in Applied Science (AAS)

The Diesel/Heavy Equipment Technology program prepares students for careers in any industry that utilizes trucks, heavy equipment, vessels or any other industrial equipment utilizing diesel power, hydraulics or other mechanical power transmission devices. Some of the many different areas of graduate employment include trucking firms, heavy equipment dealerships, logging companies, railroads, tug boats, industrial maintenance and sales.

With a strong emphasis on fluid power, LCC's Diesel/Heavy Equipment Technology program is one of few accepted for membership in the National Fluid Power Association. Students may enter the program any quarter and may transfer to pursue a bachelor's degree in Diesel Power at several baccalaureate institutions.

**Total credits required to earn this degree: 124-132 with a cumulative grade point average (GPA) of at least 2.0 in the program requirements.*

See also: (lowercolumbia.edu/programs/trades)

- Degree Requirements for Manufacturing, Trades and Transportation programs (lowercolumbia.edu/programs/trades)
- Course descriptions in LCC Catalog (lowercolumbia.edu/publications/catalog/courses)
- Distribution lists in LCC Catalog (lowercolumbia.edu/publications/catalog/distribution-lists)

Please note that many course sequences only begin in fall quarter. Please check with your program advisor for more information.

Please review both the "By Quarter Overview" and "Detailed Class Sequence" tabs below.

By Quarter Overview

First Quarter (Fall)

- COLL 101: College Success 101 (2 credits)
- MFG 105: Industrial Safety (3 credits)
- DHET 141: Hydraulics I (4 credits)
  - *DHET 142 or Instructor permission**
- DHET 142: Hydraulics II (6 credits)
  - *DHET 141 or MFG 140 or concurrent enrollment**
- DHET 100: Essentials of Mechanics (5 credits)

**Pre- and/or co-requisite(s)*

Second Quarter (Winter)

- HLTH 105: First Aid, CPR and Bloodborne Pathogens (1 credit)
- DHET 104: Electrical Systems (15 credits)
  - *MFG 105 and HLTH 105**
- MATH 106: Industrial Mathematics (5 credits)
  - *MATH 079 or TECH 079 with a C or better or instructor permission**

**Pre- and/or co-requisite(s)*

Third Quarter (Spring)

- ENGL 110: Industrial Communication (5 credits)
- DHET 114: Heavy Duty Breaks and Chassis (15 credits)
  - *MFG 105 and HLTH 105**

**Pre- and/or co-requisite(s)*

Fourth Quarter (Summer)

- BUS 144: Management of Human Relations: DIV (5 credits)
- DHET 105: Vehicle Climate Control (5 credits)
  - *AMTC 104 or DHET 104 or instructor permission**
- WELD 105: Related Welding (5 credits)

**Pre- and/or co-requisite(s)*

Fifth Quarter (Fall)

- DHET 215: Heavy Duty Engine Performance (15 credits)
  - *DHET 104 or Instructor Permission**
- COLL 289: Employment Portfolio Seminar (1 credit)

**Pre- and/or co-requisite(s)*

Sixth Quarter (Winter)

- DHET 210: Diesel Engine Rebuild (15 credits)
- DHET 288: Cooperative Work Experience (4 credits)
  - *Instructor or Cooperative Education Coordinator permission; Concurrent requirements: COLL 289 or BTEC 294 or BUS 294 or IT 294 must be taken prior to or concurrent with this course.**

Seventh Quarter (Spring)

- DHET 220: Heavy Duty Power Trains (10 credits)
- DHET 230: Advanced Shop Practices (5 credits)
  - *Completion of 60 DHET credits**
- DHET 240: Fluid Power/Electrical Theory and Design (5 credits)
  - *MATH 078/079**

**Pre- and/or co-requisite(s)*

Detailed Class Sequence

1. College Success 101

COLL 101 (2 credits)

2. Industrial Safety

MFG 105 (3 credits)

3. Hydraulics I

DHET 141 (4 credits)
Pre- and/or co-requisite(s): DHET 142 or Instructor permission

4. Hydraulics II

DHET 142 (6 credits)
Pre- and/or co-requisite(s): DHET 141 or MFG 140 or concurrent enrollment

5. Essentials of Mechanics

DHET 100 (5 credits)

6. First Aid, CPR and Bloodborne Pathogens

HLTH 105 (1 credit)

7. Electrical Systems

DHET 104 (15 credits)
Pre- and/or co-requisite(s): MFG 105 and HLTH 105

8. Industrial Mathematics

MATH 106 (5 credits)

Pre- and/or co-requisite(s): MATH 079 or TECH 079 with a C or better or instructor permission

9. Industrial Communication

ENGL 110 (5 credits)

10. Heavy Duty Breaks and Chassis

DHET 114 (15 credits)
Pre- and/or co-requisite(s): MFG 105 and HLTH 105

11. Management of Human Relations: DIV

BUS 144 (5 credits)

12. Vehicle Climate Control

DHET 105 (5 credits)
Pre- and/or co-requisite(s): AMTC 104 or DHET 104 or instructor permission

13. Related Welding

WELD 105 (5 credits)

14. Heavy Duty Engine Performance

DHET 215 (15 credits)
Pre- and/or co-requisite(s):DHET 104 or Instructor Permission

15. Employment Portfolio Seminar

COLL 289 (1 credit)

16. Diesel Engine Rebuild

DHET 210 (15 credits)

17. Cooperative Work Experience

DHET 288 (4 credits)
Pre- and/or co-requisite(s): Instructor or Cooperative Education Coordinator permission; Concurrent requirements: COLL 289 or BTEC 294 or BUS 294 or IT 294 must be taken prior to or concurrent with this course.

18. Heavy Duty Power Trains

DHET 220 (10 credits)

19. Advanced Shop Practices

DHET 230 (5 credits)
Pre- and/or co-requisite(s): Completion of 60 DHET credits

20. Fluid Power/Electrical Theory and Design

DHET 240 (5 credits)
Pre- and/or co-requisite(s): MATH 078/079

(lowercolumbia.edu/program-maps/trades)

Program Maps for Manufacturing, Trades and Transportation (lowercolumbia.edu/program-maps/trades)

- Advanced Manufacturing Technology - AAS (Engineering Technician and Multicraft Trades Option) (lowercolumbia.edu/program-maps/trades/AAS-Advanced-Manufacturing-Technology-Engineering-Tech-Multicraft-Trades)
- Advanced Manufacturing Technology - AAS (Multicraft Trades and Production Technician Option) (lowercolumbia.edu/program-maps/trades/AAS-Advanced-Manufacturing-Technology-Multicraft-Trades-Production-Tech)
- Advanced Manufacturing Technology - AAS (Production Technician and Engineering Technician Option) (lowercolumbia.edu/program-maps/trades/AAS-Advanced-Manufacturing-Technology-Production-Tech-Engineering-Tech)
- Automotive Technology - AAS (lowercolumbia.edu/program-maps/trades/AAS-Automotive-Technology)
- Automotive Technology - AAS-T (BAS-OLTM Option) (lowercolumbia.edu/program-maps/trades/AAST-Automotive-Technology-to-BAS-OLTM)
- Automotive Technology - COP (lowercolumbia.edu/program-maps/trades/COP-Automotive-Technology-Maintenance-Light-Repair)
- Commercial Truck Driving - COC (lowercolumbia.edu/program-maps/trades/COC-Commercial-Truck-Driving)
- Computer Numerical Control - COP (lowercolumbia.edu/program-maps/trades/COP-Computer-Numerical-Control)
- Diesel/Heavy Equipment Technology - AAS (lowercolumbia.edu/program-maps/trades/AAS-Diesel-Heavy-Equipment)
- Diesel/Heavy Equipment Technology - AAS-T (BAS-OLTM Option) (lowercolumbia.edu/program-maps/trades/AAST-Diesel-Heavy-Equipment-to-BAS-OLTM)
- Diesel/Heavy Equipment Preventative Maintenance - COP (lowercolumbia.edu/program-maps/trades/COP-Diesel-Heavy-Equipment-Preventative-Maintenance)
- Engineering Technician - COP (lowercolumbia.edu/program-maps/trades/COP-Engineering-Technician)
- Machine Trades - AAS (lowercolumbia.edu/program-maps/trades/AAS-Machine-Trades)
- Machine Trades - AAS-T (BAS-OLTM Option) (lowercolumbia.edu/program-maps/trades/AAST-Machine-Trades-to-BAS-OLTM)
- Machinist - COP (lowercolumbia.edu/program-maps/trades/COP-Machinist)
- Multicraft Trades - COP (lowercolumbia.edu/program-maps/trades/COP-Multicraft-Trades)
- Production Technician - COP (lowercolumbia.edu/program-maps/trades/COP-Production-Technician)
- Welding - AAS (lowercolumbia.edu/program-maps/trades/AAS-Welding)
- Welding - COP (lowercolumbia.edu/program-maps/trades/COP-Welding)