

HEAVY EQUIPMENT TECHNICIAN - ADVANCED TECHNICAL CERTIFICATE (ATC)

Explore More About This Program: <https://cwi.edu/program/heavy-equipment-technician>

Certificate Plan: Summer Start

The course sequence listed below is strongly recommended in order to complete your program requirements. Many Career and Technical Education (CTE) courses have prerequisites and/or corequisites that have been accounted for within this course sequence plan. Please register for each semester as shown using the Student Planning tool in myCWI. Consult your advisor for any questions regarding this course sequence plan.

****NOTE****

Heavy Equipment Technician (HTEC) majors are required to complete three general education courses in order to receive an Advanced Technical Certificate. Prior to beginning their HTEC courses, students must successfully complete any one (1) general education course. While it is recommended that students complete all three of their required general education courses during the spring and/or summer semester(s) prior to beginning the program, students may complete the additional required GEM courses during regular semesters while enrolled in HTEC courses if they feel capable of doing so.

First Year

Summer		Credit Hours
Full 8-Week Course Session		
Select one of the following:		3
CWI 101	Connecting With Ideas (Recommended GE Elective) ¹	
PSYC 140	Human Relations for Career and Personal Success (Recommended GEM 6) ¹	
Total Semester Credit Hours		3
Fall		
First 4-Week Course Session		
HTEC 111	Introduction to Heavy Equipment Service Industry	3
Second 4-Week Course Session		
HTEC 121	DC Circuits & Basic Electrical Systems	3
Third 4-Week Course Session		
HTEC 131	Track Systems and Mechanical Repair	3
Fourth 4-Week Course Session		
HTEC 141	Diesel Engine Theory of Operation and Repair	3
Full 16-Week Course Session		
Select one of the following:		3
ENGL 101	Writing and Rhetoric I (Recommended GEM 1) ¹	
COMM 101	Fundamentals of Oral Communication (Recommended GEM 2) ¹	
Total Semester Credit Hours		15
Spring		
First 4-Week Course Session		
HTEC 151	Preventive Maintenance	3
Second 4-Week Course Session		
HTEC 161	HVAC System Service	3
Third 4-Week Course Session		
HTEC 171	Fundamentals of Fluid Power	3
Fourth 4-Week Course Session		
HTEC 181	Principles of Electronically Managed Systems	3

Full 16-Week Course Session		
MATH 118 & 118L	Technical Math and Technical Math Lab (Recommended GEM 3) ¹	3
Total Semester Credit Hours		15
Second Year		
Summer		
First 4-Week Course Session		
HTEC 211	Gearing and Driveline Systems	3
Second 4-Week Course Session		
HTEC 221	Mobile Equipment Hydraulic Systems	3
Total Semester Credit Hours		6
Fall		
First 4-Week Course Session		
HTEC 231	Transmissions	3
Second 4-Week Course Session		
HTEC 241	On-Board Vehicle Networks and Electronic Systems Troubleshooting	3
Third 4-Week Course Session		
HTEC 251	Engine Emissions and Fuel Systems	3
Fourth 4-Week Course Session		
HTEC 261	Hydraulic System Service and Repair	3
Full 16-Week Course Session		
HTEC 271	Industry Practicum	3
Total Semester Credit Hours		15
Minimum Credit Hours Required		54

¹ The general education (GE) courses listed above are recommended by the department as the most beneficial GE options for students in this program. **Please note that students may fulfill their GE requirements by completing another course from within the designated general education category.**