

MILLWRIGHT, INDUSTRIAL MAINTENANCE TECHNOLOGY, ASSOCIATE OF APPLIED SCIENCE (AAS)

Location: Reserve

The Millwright concentration in the Industrial Mechanics and Maintenance Technology Associate of Applied Science (AAS) prepares individuals to apply technical knowledge and skills to install, maintain, troubleshoot, and repair industrial machinery and equipment such as cranes, pumps, engines and motors, pneumatic tools, conveyor systems, and production machinery in, for example, factories and production plants. Earning certificate-level awards and a technical diploma with progression in the program, students are also eligible to take NCCER Core and Millwright knowledge and skills exams (Levels 1 – 4) and earn these industry-based credentials (IBCs). All courses must be passed with a “C” or better.

Curriculum

Course	Title	Hours
First Semester		
CORE 1003	Core Industry Safety	3
MWRT 1116	Introduction to Millwright	6
General Education, Social Science - Select ECON 2213 or ECON 2223		3
General Education, Mathematics/Analytics Reasoning - MATH 1203		3
Hours		15
Second Semester		
MWRT 1216	Millwright Fundamentals I	6
MWRT 1226	Millwright Fundamentals II	6
General Education, Natural Science - PHSC 1023		3
Hours		15
Third Semester		
MWRT 2316	Intermediate Millwright I	6
MWRT 2326	Intermediate Millwright II	6
ENGL 1013	English Composition I <small>Fulfills General Education English requirement</small>	3
Hours		15
Fourth Semester		
MWRT 2416	Advanced Millwright I	6
MWRT 2426	Advanced Millwright II	6
General Education, Humanities - Select three hours from HIST, PHIL (except PHIL 2113), or RELS		3
Hours		15
Total Hours		60

Additional Academic Awards in Industrial Maintenance Technology

MILLWRIGHT I, Career and Technical Certificate (CTC)

Code	Title	Hours
CORE 1003	Core Industry Safety ¹	3
MWRT 1116	Introduction to Millwright ²	6
Total Hours		9

¹ Upon successful completion of CORE 1003, students are eligible for the Core curriculum Industry-based certification (IBC) from the National Center for Construction Education and Research (NCCER)

² Upon successful completion of CORE 1003 and MWRT 1116, students are eligible for the NCCER Millwright Level 1 IBC

MILLWRIGHT II, Certificate of Technical Studies (CTS)

Code	Title	Hours
CORE 1003	Core Industry Safety	3
MWRT 1116	Introduction to Millwright	6
MWRT 1216	Millwright Fundamentals I ¹	6
MWRT 1226	Millwright Fundamentals II ¹	6
Total Hours		21

¹ Upon successful completion of MWRT 1216 and MWRT 1226, students are eligible for the NCCER Millwright Level 2 IBC.

Millwright IV, Technical Diploma (TD)

Code	Title	Hours
CORE 1003	Core Industry Safety	3
MWRT 1116	Introduction to Millwright	6
MWRT 1216	Millwright Fundamentals I	6
MWRT 1226	Millwright Fundamentals II	6
MWRT 2316	Intermediate Millwright I ¹	6
MWRT 2326	Intermediate Millwright II ¹	6
MWRT 2416	Advanced Millwright I ²	6
MWRT 2426	Advanced Millwright II ²	6
Total Hours		45

¹ Upon successful completion of MWRT 2316 and MWRT 2326, students are eligible for the NCCER Millwright Level 3 IBC

² Upon successful completion of MWRT 2416 and MWRT 2426, students are eligible for the NCCER Millwright Level 4 IBC

Upon successful completion of the program, the graduate will be able to:

1. Apply technical knowledge and skills to install, align, repair, and maintain industrial machinery and equipment.
2. Perform preventive and predictive maintenance tasks identified through examination of industrial machinery and equipment.
3. Demonstrate safe use of hand, power, precision measuring, alignment, and other tools while performing various tasks.
4. Demonstrate the skills needed for entry and intermediate levels of employment as a millwright.

For additional career-related information and resources, visit the RPCC Career Success webpage (<https://www.rpcc.edu/workforce-training/career-success-center/career-success-center/>).