

## Controls Engineering Technician (EP) Diploma

### Semester Sequence

#### Offered at Eden Prairie Only

#### First Semester

ARET1126	Mechanical Power Transmission	3
ARET1175	Industrial Electricity and Electronics I	3
ARET1190	Programmable Logic Controllers	3
ARET1200	Introduction to Robotics	2
MATH2050	Applications of Quantitative Reasoning or	3
MATH2200	College Algebra or Any course from MnTC Goal Area 4	4

#### Total Credits 14

#### Second Semester

ARET1140	Computer Integrated Manufacturing	3
ARET1155	Automation Controls	3
ARET1180	Industrial Electricity and Electronics II	3
ARET2111	Advanced Programmable Logic Controllers	3
ENGL2125	Technical Writing or Any course from MnTC Goal Area 1	3

#### Total Credits 15

#### Third Semester

ARET1161	Mechatronic Systems	3
ARET1165	Vision Systems for QA/SPC	3
ARET1185	Sensor Applications	2
ARET2500	Industrial Networks	2
ARET2560	Instrumentation and Process Control I	3
ENGC1250	SOLIDWORKS I	4

#### Total Credits 17

#### Fourth Semester

ARET1170	Troubleshooting Mechatronic Systems	3
ARET2101	Advanced Automation Controls	3
ARET2200	FANUC Robotics Operations	2
ARET2250	FANUC Vision Systems	1
ARET2540	Project Management for Manufacturing	2
ARET2580	Instrumentation and Process Control II	3

#### Total Credits 14

#### MnTC Goal Area 1

A complete list of MnTC courses and Goal Areas that can be used to meet General Education requirements can be found at [www.hennepintech.edu](http://www.hennepintech.edu). The same course cannot satisfy more than one MnTC Goal Area requirement.

COMM2020	Intercultural Communication	3
COMM2050	Interpersonal Communication	3
COMM2060	Small Group Communication	3
COMM2130	Public Speaking	3
ENGL2001	Workplace Correspondence	2

ENGL2050	Short Form Composition and Reporting	4
ENGL2121	Writing and Research	4
ENGL2125	Technical Writing	3
ENGL2130	Introduction to Creative Writing	3

### MnTC Goal Area 4

MATH2050	Applications of Quantitative Reasoning	3
MATH2150	Introduction to Statistics	3
MATH2200	College Algebra	4
PHIL2000	Introduction to Logic	3

### Graduation (60 Credits)

Semester listings reflect the recommended sequence. Due to circumstances beyond our control, the information herein is subject to change without notice.

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