

## Controls Engineering Technician (BP/EP) Diploma

### Semester Sequence

#### Offered at Brooklyn Park and Eden Prairie

#### First Semester

ARET1126	Mechanical Power Transmission	3
ARET1175	Industrial Electricity and Electronics I	3
ARET1190	Programmable Logic Controllers	3
ARET1200	Introduction to Robotics	2
MATH1150	Applications of Quantitative Reasoning or	3
MATH1400	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
ENGL1070	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.

COMM1200	Intercultural Communication	3
COMM1250	Interpersonal Communication	3
COMM1260	Small Group Communication	3
COMM1280	Public Speaking	3
ENGL1070	Technical Writing	3

ENGL1100	Writing and Research	4
ENGL1250	Short Form Composition and Reporting	4
ENGL1300	Introduction to Creative Writing	3

### MnTC Goal Area 4

MATH1150	Applications of Quantitative Reasoning	3
MATH1250	Introduction to Statistics	3
MATH1400	College Algebra	4
PHIL1000	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.

3/27/2023 : BP 4010 / EP 4011