

Electrical Control Systems (EC22)

Diploma eMap

This eMap, along with regular meetings with your program advisor and using DegreeWorks, will help you remain on track to finish your program as quickly as possible and graduate from Georgia Northwestern Technical College. This eMap is intended to be used when beginning the program in Fall semester. Starting the program in Spring or Summer semesters may alter the suggested courses or course availability. This pathway is based on the 2026-2027 academic year.



OCCUPATIONAL CURRICULUM (48 Credit Hours)

1 st set of suggested courses			
Course		Hours	Completed
IDSY 1101	DC Circuit Analysis (occurs in B-term)	3	☐
IDSY 1105	AC Circuit Analysis (occurs in C-term)	3	☐
IDSY 1111	Industrial Wiring	4	☐

IDSY 1101 and IDSY 1105 are the recommended courses as they may be pre-requisites or courses that help meet certificate requirements. Additional courses may meet this requirement. See Course Catalog for more info. IDSY 1190 is an added course to obtain an embedded certificate (RT41).

2 nd set of suggested courses			
Course		Hours	Completed
IDSY 1112	Motor Controls I (occurs in B-term) (Prerequisites: IDSY 1101 and IDSY 1105)	4	☐
IDSY 1113	Motor Controls II (occurs in C-term) (Prerequisite: IDSY 1105, IDSY 1101, IDSY 1110)	4	☐
IDSY 1181	Fluid Power Systems (occurs in B-term)	4	☐
IDSY 1191	Pumps and Piping Systems (occurs in C-term)	3	☐

3 rd set of suggested courses			
Course		Hours	Completed
IDSY 2000	PLC I (occurs in B-term) (Prerequisite: IDSY 1105, IDSY 1101, IDSY 1110)	4	☐
IDSY 2001	PLC II (occurs in C-term) (Prerequisite: IDSY 1105, IDSY 1101, IDSY 1110, IDSY 1120)	4	☐

IDSY 1195 is an added course to obtain an embedded certificate (RT41). IDSY 1210 is strongly recommended to be taken prior to IDSY 1220. AUMF 2060 should be taken the same semester, or after completing, AUMF 1150.

Additional information for the Electrical Control Systems Diploma and program requirements can be found at [2026-2027 Catalog](#).

4 th set of suggested courses			
Course		Hours	Completed
IDSY 1230	Instrumentation (Strongly preferred the following courses are taken before IDSY 1230: IDSY 1105, IDSY 1101, IDSY 1112, IDSY 1113)	4	☐
XXXX xxxx	Occupational Elective: AUMF 1150, Introduction to Robotics*	3	☐
XXXX xxxx	Occupational Elective: AUMF 2060, Work Cell Design*	2	☐

BASIC SKILLS COURSES (8 Credit Hours)

Please note: Basic Skills Courses can be taken during the 4th and 5th set or anytime a suggested course is not available and student needs another course to meet hours.

Basic Skills Courses			
Course		Hours	Completed
ENGL 1005	Applied Technical Communication	3	☐
EMPL 1000	Interpersonal Relations and Professional Development	2	☐
MATH 1012 OR MATH 1013	Foundations of Mathematics OR Algebraic Concepts	3	☐

Total Credit Hours: 44 Minimum Credit Hours Required for Graduation

Electrical Control Systems Diploma Planning Notes:

- Courses for this Diploma are offered at the Floyd County Campus.
- (*) Course can be taken any available semester. Course location/campus may vary.
- To complete a full-time schedule in the 4th set OR if an occupational curriculum course is at full capacity, student can be placed in a basic skills course and/or occupational elective course if they are open.
- If IDSY 1190, IDSY 1195, and AUMF courses (see Occupational Electives, 4th set) are completed, student will also earn a Robotic Technician (RT41) Certificate.
- The Program Advisor for EC22 is Wesley Runyon, wrunyon@gntc.edu.