

EARN COLLEGE CREDIT

DUAL CREDIT

During their senior year, students can participate in the Tech Prep Dual Credit Program at Elgin Community College (ECC) during the school day and receive both high school and college credit. Enrollment in this program is limited, and an application is required. The school district pays for tuition at ECC; students must pay for required supplies, fees, and some textbooks.

ECC offers Tech Prep Dual Credit classes in over 20 career and technical areas. Industry-recognized certification is available in a number of high-demand areas.

ARTICULATED CREDIT

A number of D300 courses are linked with ECC courses and students may earn college credit for these high school courses by enrolling at ECC after graduation.

Each articulated high school course is the equivalent of an ECC course and meets ECC's learning objectives and task competencies. To receive college credit, students must:

- Complete the articulated high school course with a final grade average of "B" or better each semester.
- Enroll in a degree-seeking program at ECC in the fall semester following graduation (or within 27 months of high school graduation). The high school graduate is entitled to ECC college credit and to accelerated placement at Elgin Community College.

POTENTIAL CAREERS

- Aerospace Engineer
- Civil Engineer
- Computer Engineer
- Drafting and Design Engineer
- Electrical Engineer
- Industrial Engineer
- Mechanical Engineer
- Robotics Engineer



ILLINOIS
Pathways

For more information:
www.d300.org/pathways

STEM / ENGINEERING Pathway

@ Dundee-Crown High School



DISTRICT 300

A PATHWAY TO SUCCESS IN COLLEGE AND CAREER

District 300 strives to ensure every student is college and career ready upon graduation. Our pathway programs provide students with the skills to obtain an entry-level job upon graduation and the knowledge to be successful in a college classroom.

FOUR YEAR SEQUENCE: RECOMMENDED COURSES

Designed to begin in 9th grade; please see a counselor for more detailed information about this sequence of courses.

FRESHMAN YEAR

Computer Aided Design 1 (one semester) (7805)
Develop basic drafting techniques with computer-aided-drafting (CAD) and image duplication.

Computer Aided Design 2 (one semester) (7806)
Learn advanced drafting principals with AutoCAD.

SOPHOMORE YEAR

Pre-Engineering / CAD (year-long) (7807 / 7808)
A capstone class for college bound engineering students or industry bound specialists.

Robotics 1 (year-long) (7832 / 7833)
Design, construct, and program your own robotic vehicle capable of performing autonomous and operated controlled tasks.

JUNIOR YEAR

Robotics 2 (year-long) (7834 / 7835)
Enhance your design engineering knowledge and prepare for the First Tech Challenge robotic competition.

D300 Internship Program (6869 / 6870)

The *District 300 Internship Program* is a partnership between D300 high schools and the industrial, business, professional and service communities of the Fox Valley area. The program provides an opportunity for hands-on career exploration in a variety of vocational areas.

SENIOR YEAR

ECC Tech Prep Dual Credit Program

Earn college credit while selecting classes that focus on over 20 career and technical fields and provide industry certification opportunities. You will attend Elgin Community College either all or part of the day.

THREE YEAR SEQUENCE: RECOMMENDED COURSES

Designed to begin in 10th grade; please see a counselor for more detailed information about this sequence of courses.

SOPHOMORE YEAR

Computer Aided Design 1 (one semester) (7805)
Develop basic drafting techniques with computer-aided-drafting (CAD) and image duplication.

Computer Aided Design 2 (one semester) (7806)
Learn advanced drafting principals with AutoCAD.

JUNIOR YEAR

Pre-Engineering / CAD (year-long) (7807 / 7808)
A capstone class for college bound engineering students or industry bound specialists.

Robotics 1 (year-long) (7832 / 7833)
Design, construct, and program your own robotic vehicle capable of performing autonomous and operated controlled tasks.

SENIOR YEAR

Robotics 2 (year-long) (7834 / 7835)
Enhance your design engineering knowledge and prepare for the First Tech Challenge robotic competition.

(or) D300 Internship Program (6869 / 6870)

The *District 300 Internship Program* is a partnership between D300 high schools and the industrial, business, professional and service communities of the Fox Valley area. The program provides an opportunity for hands-on career exploration in a variety of vocational areas.

(or) ECC Tech Prep Dual Credit Program

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ADDITIONAL ELECTIVE COURSES TO CONSIDER:

Automotive Technology 1, 2, and 3
Electricity 1, 2, and 3
Woods and Production Technology 1, 2, and 3

COURSES RELATED TO THIS PATHWAY OFFERED IN THE ECC TECH PREP PROGRAM:

Advanced Concepts in Solid Works
Industrial Design Problems
Introduction to Engineering Design
Introduction to Solid Works

EXAMPLES OF REGIONAL POST-SECONDARY DEGREES

ASSOCIATE'S DEGREE (2 YEARS)

Associate in Engineering Science
Elgin Community College

BACHELOR'S DEGREE (4 YEARS)

Bachelor of Science in Industrial and
Systems Engineering, Mechanical Engineering,
or Technology
Northern Illinois University

MASTER'S DEGREE (BACHELOR'S PLUS 2+ YEARS)

Master of Science in Integrated Systems
Engineering, Industrial Management, or
Engineering Education
Northern Illinois University