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. Industryrecognized 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

Logistician

Manufacturing

Estimator or

Technician

Pattern and

Model Maker

Precision Machinist

Quality Control

SPC Coordinator

Traffic Manager

Tool and Diemaker

Technician

Tool Buyer

Welder

• Assembler

- Boilermaker
- **CNC** Operator or Programmer
- Design, Environmental, or Safety Engineer
- Foundry Worker
- Freight, Stock, and Material Mover
- Health and Safety Representative
- **Header Operator**
- Industrial Machinery Mechanic
- Inspector
- Labor Relations Manager





For more information:

www.d300.org/pathways

ADVANCED MANUFACTURING Pathway

@ Hampshire High School





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

Advanced Manufacturing 1 (7841 / 7842) Receive cutting-edge classroom and laboratory experiences with fundamental machine tool technology and a focus on drill presses, basic lathes, and related tooling.

SOPHOMORE YEAR

Advanced Manufacturing 2 (7843 / 7844) Study horizontal mills, vertical mills, CNC basics, and manufacturing theory.

JUNIOR YEAR

Advanced Manufacturing 3 (7845 / 7846) Develop CNC operating and programming expertise while completing a comprehensive project.

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.

RECOMMENDED ELECTIVES

Students in the Advanced Manufacturing Program should choose one or two additional electives courses each year. Choices include:

Automotive Technology 1 (7801)

Acquire the fundamentals of engines used in land, water, air, and space transportation while exploring career opportunities.

Automotive Technology 2 (7802) Learn the basics of engine repair, electrical systems, and vehicle maintenance.

Automotive Technology 3 (7803) Prepare for Automotive Service Excellence (ASE) testing that leads to certification.

Computer Aided Design (CAD) 1 (7805) Develop basic drafting techniques with computeraided-drafting (CAD) and image duplication.

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

Pre-Engineering CAD / 3D Modeling (7807 / 7808) A capstone class for college bound engineering students or industry bound specialists.

Welding 1 (7816)

Study welding techniques, equipment setup, and metal identification while engaging in laboratory work.

Welding 2 (7817)

Apply practical experience of advanced welding safety, tools, and machine function.

RECOMMENDED ELECTIVES (CONTINUED)

Students in the Advanced Manufacturing Program should choose one or two additional electives courses each year. Choices include:

Welding 3 (7818)

Provides students with entry-level career welding skills.

Woods and Production Technology 1 (7822)

Study the construction of wood products while developing experience with tools and laboratory safety.

Woods and Production Technology 2 (7823)

Design, construct, and finish wood furniture and cabinetry projects.

Woods and Production Technology 3 (7825)

Develop employment competencies for a variety of manufacturing-related occupations.

*Please note the Advanced Manufacturing Pathway course sequence featured in this brochure is only a recommendation. Students may elect to begin program either freshman or sophomore year.

EXAMPLES OF REGIONAL Post-secondary degrees

CERTIFICATIONS (1 YEAR)

Manufacturing Engineering Technology (MET) Certificates

ASSOCIATE'S DEGREE (2 YEARS)

Associate's Degree in Applied Science (A.A.S.) Concentration in Manufacturing

BACHELOR'S DEGREE (4 YEARS)

Bachelor of Science in Technology (B.S.T.) Emphasis in Manufacturing Engineering Technology

MASTER'S IBACHELOR'S PLUS 2+ YEARS)

Master of Science in Industrial and Systems Engineering (M.S.I.S.E)