

MFG425 Advanced Manufacturing Methods (3 hrs)
 ELEC200 Circuit Analysis I (3 hrs)
 ELEC218 Motors and Controls (3 hrs)
 MFG123 Manufacturing Processes and Methods I (3 hrs)
 MFG124 Manufacturing Processes and Methods II (3 hrs)
 MFG203 Industrial Operation (3 hrs)
 MFG290 GD&T and Metrology (3 hrs)
 MFG306 Plastic Processing (3 hrs)
 MFG316 Design for Manufacturing and Tooling (3 hrs)
 MFG387 Cooperative Education in Manufacturing Technology (3 hrs)
 MFG421 Manufacturing Engineering Analysis (3 hrs)
 MFG470 Integrated Product and Process Design (3 hrs)
 MFG490 Manufacturing Enterprise Capstone (3 hrs)
 QUAL320 Industrial Quality Control (3 hrs)

One course from the following:

ACC130 Accounting for Nonbusiness Majors (3 hrs)
 ACC240 Principles of Financial Accounting (3 hrs)

Minor Requirements 0 hours

No minor is required.

University Elective Courses 5 hours

Program Total 124 hours

POLYMERS AND COATINGS TECHNOLOGY CURRICULUM (PLCT)

The polymers and coatings curriculum is designed to provide the background necessary for graduates to find employment in companies that manufacture and use paints, coatings, rubber, plastics, polymers, adhesives and inks, or in companies that manufacture raw materials for these industries. Students completing this curriculum have met the major and minor requirements for graduation. No outside minor is needed.

An active articulation agreement exists between this program and a community college. For further details, see the Articulation Agreements section, page 13.

General Education Requirements 50 hours

Area I Symbolics and Communication

1. See page 23
2. See page 23
3. ENGL324 Principles of Technical Communication (3 hrs)
4. MATH120 Calculus I (4 hrs)
5. INDT201 Microcomputer Applications in Technology (3 hrs)

Area II Science and Technology

1. CHEM121/122 General Chemistry I with lab (4 hrs)
2. BIOL105 Introductory Biology for Non-Majors (4 hrs)
3. PHY221 Mechanics, Sound, and Heat (4 hrs)

Area III Social Sciences

1. See page 24
2. See page 24
3. ECON201 Principles of Macroeconomics (3 hrs)
4. ECON202 Principles of Microeconomics (3 hrs)

Area IV Arts and Humanities

1. See page 25
2. See page 25
3. See page 25
4. See page 25

Additional Requirements 15 hours

CHEM123/124 General Chemistry II (4 hrs with lab)
 CHEM381 Instrumentation of Chemical Technology (2 hrs)
 MATH105 College Algebra (3 hrs)
 MATH107 Plane Trigonometry (2 hrs)
 PHY222 Electricity and Light (4 hrs)

Physical Education/Graduation Requirements 2 hours

Major Requirements 54 hours

Required Courses 42 hours

CHEM281 Quantitative Analysis (4 hrs)
 INDT310 Polymers for Engineers and Technologists (3 hrs)
 CHEM361 Fundamentals of Physical Chemistry (3 hrs)
 CHEM371 Organic Chemistry I (3 hrs)
 CHEM372 Organic Chemistry II (3 hrs)
 CHEM373 Organic Chemistry Laboratory (2 hrs)
 INDT387 Cooperative Education in Interdisciplinary
 Technology (3 hrs)
 INDT400 Polymers and Coatings Technology I (3 hrs)
 INDT401 Polymers and Coatings Technology I Laboratory (3 hrs)
 INDT402 Polymers and Coatings Technology II (3 hrs)
 INDT403 Polymers and Coatings Technology II
 Laboratory (3 hrs)
 INDT405 Coating Processes I (3 hrs)
 INDT460 Advanced Coatings Topics (3 hrs)
 INDT479 Special Topics: Introduction to Coating Raw
 Materials (3 hrs)

Elective Courses 12 hours

Twelve hours from the following:

CHEM241 Materials Science (3 hrs)
 CHEM340 Introduction to Industrial Chemistry (3 hrs)
 CHEM415 Environmental Chemistry (3 hrs)
 CHEM478 Special Topics (2 hrs)
 INDT377/378/379 Special Topics (3 hrs)
 INDT416 Water-Based Coatings (3 hrs)
 INDT477/478/479 Special Topics (3 hrs)
 INDT487 Cooperative Education in Interdisciplinary
 Technology (1 hr)

Minor Requirements 0 hours

No minor is required.

University Elective Courses 3 hours

Program Total 124 hours

CONSTRUCTION MANAGEMENT MINOR (CNST)

This minor is designed to provide a background in fundamental technical applications for students with majors outside the department who expect to work in industry. Employment opportunities are enhanced for persons with technical course work.

University elective courses in the minor are selected to relate to the student's major subject area. Academic advising to determine elective course choices is provided by the School of Engineering Technology. A maximum of six hours may be transferred from outside the department.

Required Courses 23 hours

CNST125 Introduction to Construction (2 hrs)
 CNST201 Construction Systems (3 hrs)
 CNST202 Construction Materials (3 hrs)
 CNST228 Construction Graphics (3 hrs)
 CNST229 Analysis of Commercial Prints (3 hrs)
 CNST361 Planning and Scheduling (3 hrs)
 CNST302 Contract Documents, Regulations, and Specifications (3 hrs)
 CNST304 Construction Estimating and Bidding (3 hrs)

Minor Total 23 hours