

LANSING COMMUNITY COLLEGE

CURRICULUM GUIDE

Chemical Process Technology
Associate in Applied Science Degree

Curriculum Code: 0859 (Effective Fall 2005 – Summer 2010)

Chemical Process Technologists are trained for employment as process operators in the chemical and related industries. Process operators are required to maintain safety, health and environmental standards in the plant; handle, store and transport chemicals; operate, monitor and control continuous and batch processes; and participate in routine and preventative maintenance of equipment and instrumentation. **Not all courses in this program transfer to all colleges.** Students planning to transfer should see an academic advisor or counselor before enrolling in any course.

PREREQUISITES

Students should see *Course Descriptions* or *Course Offerings* for course prerequisite information. See the *Assessment and Placement Testing* section for skills assessment and advising information.

INFORMATION

Contact the Science Department, Arts and Sciences Building, Room 301, telephone number (517) 483-1092.

REQUIREMENTS

| CODE | TITLE | TOTAL: 44 CREDITS CREDIT HOURS |
|---------|------------------------------------|-----------------------------------|
| CHEM151 | General Chemistry Lecture I | 4 |
| CHEM152 | General Chemistry Lecture II | 3 |
| CHEM161 | General Chemistry Lab I | 1 |
| CHEM162 | General Chemistry Lab II | 1 |
| CHEM182 | Introductory Organic Chemistry | 3 |
| CHEM192 | Introductory Organic Chemistry Lab | 1 |
| CHEM211 | Chemical Process Technology I | 4 |
| CHEM262 | Quantitative Analysis | 3 |
| CPSC120 | Introduction to Computers | 3 |
| ENVR131 | Industrial Process Safety | 3 |
| FIRE220 | Hazardous Materials/Fire Service | 4 |
| MATH121 | College Algebra I | 4 |
| SOCL120 | Introduction to Sociology | 4 |
| SPCH120 | Dynamics of Communication | 3 |
| STAT170 | Introduction to Statistics | 3 |

LIMITED CHOICE REQUIREMENTS

TOTAL: 18-19 CREDITS

Complete the indicated number of credits from **EACH CHOICE** listed below.

CHOICE 1: General Education Core Areas **0 Credits**
 (See *General Education Core Requirements* for information on how to fulfill these requirements.
 Core area proficiency exams, where appropriate, are available for each core area.)

| | |
|--|---|
| Communication Core Area (See Note 1) | 0 |
| Global Perspectives and Diversity Core Area (See Note 1) | 0 |
| Mathematics Core Area (See Note 1) | 0 |
| Science Core Area (See Note 1) | 0 |
| Writing Core Area (See Note 2) | 0 |

CHOICE 2: Writing (See Note 3) **3–4 Credits**

| | |
|------------------------------|---|
| WRIT121 Composition I | 4 |
| WRIT124 Technical Writing | 3 |

CHOICE 3: Physics **4 Credits**

| | |
|-----------------------------------|---|
| PHYS200 Applied Physics | 4 |
| PHYS221 Introductory Physics I | 4 |

CHOICE 4: Related Courses **11 Credits**

| | |
|---|---|
| ENVR121 Environmental Rules and Regulations | 3 |
| ENVR122 Environmental Sampling & Instrumentation | 4 |
| ELTE100 Electrical Safety Practices | 1 |
| ELTE110 Practical Electricity | 3 |
| MFGM112 Industrial Pneumatics | 3 |
| MFGM175 Industrial Hydraulics | 4 |
| PMMT190 Metallurgy and Heat Treat | 4 |
| SCIN287 Science Technology Internship | 4 |

MINIMUM TOTAL **62**

NOTES:

1. Students completing "REQUIREMENTS" have fulfilled the requirements for this Core area.
2. Students completing CHOICE 2 have fulfilled the requirements for this Core area.
3. WRIT121 is recommended for students planning to transfer.

SUGGESTED COURSE SEQUENCE

Students should see course descriptions to find out when departments plan to offer courses. Students who for any reason are unable to follow the course sequence suggested below (for example, those who are part-time, have transferred in courses from another school, or have prerequisites to fulfill) should contact an academic advisor or counselor for help with adjustments.

| I | II | III | IV |
|------------|------------|------------|------------|
| CHEM151 | CHEM152 | CHEM262 | CHEM182 |
| CHEM161 | CHEM162 | STAT170 | CHEM192 |
| CPSC120 | FIRE220 | Lim. Ch. 3 | CHEM211 |
| MATH121 | SOCL120 | Lim. Ch. 4 | ENVR131 |
| Lim. Ch. 2 | SPCH120 | | Lim. Ch. 4 |
| | Lim. Ch. 4 | | |