

# MASTER OF FOOD PROCESS ENGINEERING

## Curriculum

Candidates are required to take a total of 32 credit hours, 18 of which must be from the core courses listed below, six to eight credit hours must be selected from FdSN elective courses, and six to eight credit hours must be selected from the Department of Chemical and Biological Engineering courses. Courses are offered at the Illinois Institute of Technology Mies Campus or via internet with the exception of FDSN 506.

| Code   | Title   | Credit Hours   |
|--|---|----------------|
| <b>Core Courses</b>                                  |   | <b>(18)</b>    |
| FDSN 505   | Food Microbiology                                       | 3              |
| FDSN 506   | Food Microbiology Laboratory <sup>1</sup>               | 3              |
| FDSN 521   | Food Process Engineering                                | 3              |
| FDSN 522   | Advanced Food Process Engineering                       | 3              |
| FDSN 524   | Fundamentals of Food Science                            | 3              |
| FDSN 541   | Principles of Food Packaging                            | 3              |
| <b>Electives</b>                                     |   | <b>(12-16)</b> |
| Select six to eight credit hours from the following: |   | 6-8            |
| FDSN 501   | Advanced Nutritional Biochemistry                       | 3              |
| FDSN 502   | Development, Delivery, and Dissemination                | 3              |
| FDSN 504   | Food Biotechnology                                      | 3              |
| FDSN 507   | Food Analysis   | 3              |
| FDSN 508   | Food Product Development                                | 3              |
| FDSN 511   | Food Law and Regulations                                | 3              |
| FDSN 520   | Low-Acid Canned Food Regulations and Microbiology       | 3              |
| FDSN 523   | Food Engineering Process Delivery                       | 3              |
| FDSN 526   | Engineering Principles of Food                          | 3              |
| FDSN 531   | HACCP Planning and Implementation                       | 3              |
| FDSN 593   | Seminars in Food Science and Nutrition                  | 1              |
| FDSN 594   | Special Projects <sup>2</sup>                           | 1-6            |
| FDSN 597   | Special Problems <sup>2</sup>                           | 1-6            |
| Select six to eight credit hours from the following: |   | 6-8            |
| CHE 426  | Statistical Tools for Engineers                         | 3              |
| CHE 439  | Numerical and Data Analysis                             | 3              |
| CHE 494  | Process Design I  | 3              |
| CHE 560  | Statistical Quality and Process Control                 | 3              |
| CHE 577  | Bioprocess Engineering                                  | 3              |
| ENVE 513   | Biotechnological Processes in Environmental Engineering | 3              |
| ENVE 542   | Physicochemical Processes in Environmental Engineering  | 3              |

**Minimum degree credits required: 32**

- <sup>1</sup> FDSN 506 is required unless the student has enough professional experience to allow a substitute class; the decision will be made by the FdSN program director.
- <sup>2</sup> Students can enroll in FDSN 594 and FDSN 597 with a maximum of six credit hours total between both courses with FdSN adviser approval. However, when FDSN 597 is used as a short course, the total credit hours must not exceed eight between FDSN 594 and FDSN 597.

Students may enroll in a ChBE course that is not listed above, with FdSN adviser approval.