

## GRADUATE CERTIFICATE IN PARTICLE TECHNOLOGY

Approved unanimously by Faculty Senate on February 6, 2016, the Graduate Certificate in Particle Technology from the Department of Chemical and Biomolecular Engineering is designed for engineering professionals working in the process industries and/or for undergraduate or graduate engineers desiring to expand their knowledge of particle technology. The objective is to equip professionals with the knowledge and ability to meet the expectations of employers in the processing industry with respect to particle technology expertise. Completion of the certificate requirements are noted on the student's graduate transcript and a certificate is awarded and signed by the Director of the Graduate Certificate in Particle Technology, the Chair of the Department of Chemical and Biomolecular Engineering, and the Assistant Dean/Director of the Engineering Outreach Program.

### Admission Requirements

- Satisfactory completion of STEM undergraduate course prerequisites (earning a GPA of 3.0 or higher) in chemical engineering, mechanical engineering, civil engineering, environmental engineering, chemistry, materials science or physics disciplines, if the undergraduate program included engineering thermodynamics, calculus, differential equations, and linear algebra, and transport phenomena (fluid mechanics, heat and mass transport).
- Student status:
  - Accepted as a qualified University of Delaware undergraduate student.
  - Accepted as a qualified matriculated graduate student in a University of Delaware graduate engineering degree program.
  - Professionals accepted into the Graduate Certificate program.
  - Professionals registered through Professional Continuing Studies.
- To be accepted into the Graduate Certificate program, applicants must submit a UD graduate application to the Graduate Certificate in Particle Technology (MENG-CERT, CERT-PT) including:
  - Resume.
  - Unofficial transcript(s) for undergraduate work (and graduate work, if applicable).
  - A statement of purpose or personal essay sharing relevant information outlining how he/she is a good match (i.e. educational plans, career goals and how the MEPT graduate program relates to them) and the coursework and timing requested by the applicant.

### Course Requirements

- **Certificate Core Course (3 credits)**
  - CHEG 608—Introduction to Particle Technology
- **Certificate Course Electives (6 credits including any 2 of the following 3 credit courses)**
  - CHEG 670—Particle Rate Processes
  - CHEG 671—Particle Transport

- CHEG 672—Mathematics of Particle Systems
- CHEG 673—Particle Properties and Characterization
- All courses may be completed via distance learning.

### **Degree Requirements**

Satisfactory completion of the 9 credit graduate certificate requires:

- The student earns a grade of B- or better.
- The student maintains an overall GPA of 3.0 or higher.
- The student completes the core and elective graduate certificate requirements (see course requirements).

### **Funding**

The Graduate Certificate in Particle Technology program does not offer funding (fellowship or teaching assistantship), however, a reduced graduate tuition has been approved for graduate certificate students.