Chemical Engineering Graduate Programs

Did you know?

- Did you graduate from UML engineering with a GPA over 3.0 within the past five years? *We'll waive the application fee and the GRE requirement!*
- A Masters of Science in Chemical Engineering and Energy Engineering—Nuclear Option consists of 30 credits for a thesis, project-based or coursework-only degree.
- You can do your degree as a full-time or part-time!
- Doctoral programs - both PhD and D.Eng - are available in Chemical Engineering.
- Teaching and/or Research Assistantships may be available for full-time grad students!
- We have externally funded research—over $8 million/year for the College—including projects in biomanufacturing, applications of nanotechnology & nanomanufacturing!
- Other Graduate options include the Masters in Education, MBA and new Masters in Innovation and Technological Entrepreneurship.

UMASS LOWELL

Chemical Engineering

Graduate Programs

Start Building Your Future Career

Quality!- Courses are taught by well qualified full-time faculty or adjunct faculty from industry
Value!! - $1678 tuition + fees per 3 credit on-campus course for Massachusetts residents
*Courses offered through Continuing Ed- $1485 tuition & fees per 3 credit course.
Convenience! - We're close to Boston

Sign up for a course as a non-matriculated student, or apply for the degree program

Chemical Engineering Info:
Web: chemical.uml.edu
Dept. Office: 978-934-3150

Graduate School Info:
www.uml.edu/grad
978-934-2390

Continuing Education Info:
continuinged.uml.edu
978-934-2474

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Grad Coordinator, Nuclear
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Lowell, Massachusetts 01854
web: chemical.uml.edu

UMASS LOWELL

Fall 2009 Chemical Graduate Course Offerings

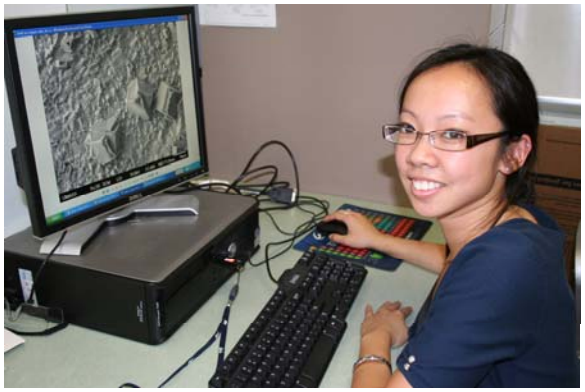
Chemical Engineering

Courses are scheduled in the late afternoon and evening to provide study opportunities for students with full-time employment.

Fall 2009 Graduate Classes

All courses 6pm-8:50pm unless noted in blue

Day	Course Title	Instructor
Monday		
10.502.201	Principles of Chemical Engineering 9:30-10:20am MWF (for non ChemE majors)	Walkinshaw
10.528.201	Advanced Transport Phenomena 3:30-4:45pm MW	Donatelli
10.539.201	Mathematical Methods for Engineers 5:00-6:15pm MW	White
22.513.201	Finite Element Analysis I 5:00-6:15pm MW	Sherwood
22.576.201	Engineering Project Management 6:30-9:30pm	Shina
81.519.201	Biochemistry I 5:30 -6:50pm MW	Falcone
Tuesday		
10.506.201	Colloidal Nanoscience and Nanoscale Eng. 2:30-4:50pm	Bonner
10.529.201	Recent Advances in Nanotechnology & Green Chemistry	Manohar
10.586.801	Biotechnology Processing Projects Lab 3:00-5:50pm	Lawton
22.521.201	Solar Fundamentals 5:00pm-6:20pm	Duffy
26.514.201	Statistics for Six Sigma	Stacer
Wednesday		
10.535.201	Cell & Microbe Cultivation 5:00-7:30pm	Lawton
26.506.201	Polymer Structure, Props & Applications	Nagarajan
26.544.201	Advanced Plastics Materials I	Driscoll
Thursday		
25.550.201	Introduction to Nanotechnology	Mead
26.503.201	Mechanical Behavior of Polymers	Stacer
Friday		
10.541.201	Nanocharacteriz'n by STEM, TEM & AFM	Lee
TBA		
24.505.201	Reactor Physics	TBA



Graduate Information

M.S. in Chemical Engineering

- **Requirements:** 30 credit hours which can include a 6 credit thesis, 3 credit project or coursework only. Students are required to take at least one course from each of the three core areas:
  - Advanced Mathematics
  - Thermal/Fluid Processes
  - Solid Mechanics

M.S. in Energy Engineering—Nuclear Option

- **Requirements:** 30 credit hours which can include a 6 credit thesis, 3 credit project or coursework only.

Graduate Certificate Programs (I = Interdisciplinary):

- Biotechnology and Bioprocessing
- Materials Science and Engineering
- Modeling, simulation and Control of Systems and Processes
- Biomedical Engineering **I**
- Nanotechnology **I**
- Energy Conversion **I**

D.Eng. and Ph.D. in Chemical Engineering

Requirements:

- 63 credit hours of graduate level courses total
- 42 credit hours of graduate course work
- 21 credit hours of doctoral dissertation
- For the DEng degree, 9 of the 42 coursework credits are Management courses

Teaching & Research Assistantship Stipend/Waiver Information:

(for full year, double the amounts shown)

Item	half-time	TA/RA per semester	full-time	TA/RA per semester
	in-state	out-of-state & foreign	in-state	out-of-state & foreign
stipend	$3252	$3252	$6,504	$6,504
tuition & fees waiver	$3261	$5228	$5761	$9695
total TA/RA value per semester	$6513	$8480	$12,265	$16,199

Education Costs - Full time (9 credits) per semester:

In-state: $5034, Out of state: $9365
New England Regional & New England Proximity: $7380

Department Faculty Members

Frank J. Bonner, Professor & Grad Coordinator
S.B. S.M. Massachusetts Institute of Technology,
Ph.D. University of Delaware,
Fil.Lic., Fil.Dr. University of Uppsala, Sweden

Gilbert J. Brown, Professor & Nuclear Eng. Grad Coordinator
B.S. Cornell University,
S.M., Ph.D. Massachusetts Institute of Technology

Alfred A. Donatelli, Professor & Department Chair
B.S., M.S. Lowell Technological Institute,
Ph.D. Lehigh University

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B.Sc., M.Sc. University of Madras, India, M.S. Southern Illinois University, Ph.D. University of Pennsylvania

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Krishna Vedula, Professor & Dean Emeritus
B.Tech. IIT, Bombay, M.S. Drexel University,
Ph.D. Michigan Technological University

John W. Walkinshaw, Professor & Undergrad Coordinator
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Ph.D. Victoria University of Manchester, England, P.E.

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Adjunct Faculty Members

Leo M. Bobek
B.S. M.S., University of Lowell

Jun Seok Lee
B.S. Dongguk University, Korea, M.S. University of Southern California, D.Eng. Univ. Massachusetts Lowell

Susan E. Poniatowski
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