

# REGENERATIVE ENGINEERING (MS)

---

The Master of Science (M.S.) in Regenerative Engineering program is intended to train a new transdisciplinary workforce for Regenerative Engineering. Regenerative Engineering is a new field defined as the convergence of advanced materials science, stem cell science, physics, developmental biology and clinical translation for the regeneration of complex tissues and organ systems. The master program is administrated by the Department of Chemical and Biomolecular Engineering and the Department of Materials Science and Engineering at the University of Connecticut.

## Requirements

The M.S. in Regenerative Engineering requires a minimum of 30 credits. The credits include: 21 credits of advanced course work and successful completion of a thesis research (Plan A). Thesis research is equivalent to nine credit hours. The thesis must be an original and significant contribution to the field of regenerative engineering and related science and must be defended orally according to Graduate School requirements.

Course	Title	Credits
<b>Core Courses</b>		
CHEG 5013	Principles of Regenerative Engineering and Applications	3
CHEG 5352	Polymer Properties	3
CHEG 5373	Biochemical Engineering	3
MSE 5001	Principles of Materials Engineering	3
MSE 5700		3
<b>Elective Courses</b>		
A total of six elective credits are required.		
Students will choose from a list of approved courses including, but not limited to: <sup>1</sup>		6
BME 5000	Physiological Systems I	
BME 6086	Special Topics In Biomedical Engineering	
CHEG 5358		
CHEG 5395	Investigation of Special Topics	
CSE 5800	Bioinformatics	
CSE 5810	Introduction to Biomedical Informatics	
CSE 5815		
MSE 5322	Materials Characterization	
MSE 5336	Material Selection in Mechanical Design	

<sup>1</sup> Students may request permission from the Advisory Committee and the Program Director to enroll in an elective that is not on the list of approved courses.