

Tissue Engineering (Minor)

To see more about what you will learn in this program, visit the Learning Outcomes website (<https://apps.oirp.ncsu.edu/pgas/>)!

The minor in Tissue Engineering is intended to provide graduates with the knowledge base and practical skills that will prepare them to quickly contribute to research and manufacturing of devices designed for repair and replacement of tissues and organs. Interested students should contact the BME Student Services Coordinator for information and application materials.

Admissions and Certification of Minor

The BME staff will hold primary responsibility for administration of the Minor in Tissue Engineering. Information about the minor and application materials will be handled by the BME student services coordinator. BME faculty members will serve as advisors for the minor. To be admitted to the program, a student must have a GPA of at least 2.0. Application for admission to any University minor program is now available via MyPack Portal. Admission will be based upon the student's academic record, and in most cases no longer requires departmental review. To apply to Add a Minor, go to: https://go.ncsu.edu/minor_coda (https://go.ncsu.edu/minor_coda/).

Contact Person

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Effective Date: 6/2009

SIS Code: 14TISSEGRM

Plan Requirements

- Complete a minimum of 22 credit hours of designated courses. All courses required for the minor must be completed with a C- or better.
- To be admitted to the minor in Tissue Engineering, they will need to complete two prerequisite courses, CH 223 Organic Chemistry II and BIO 183 Introductory Biology: Cellular and Molecular Biology with a C- or better.

Code	Title	Hours	Counts towards
Required Courses			
BIT 410	Manipulation of Recombinant DNA	3	16
BIT 466	Animal Cell Culture Techniques	3	
BME/BEC 483	Tissue Engineering Technologies	10	

BME 484	Fundamentals of Tissue Engineering	3
BME 498	Undergraduate Research in Biomedical Engineering	3
Select one of the following:		3
CE 225	Mechanics of Solids	3
CE 282	Hydraulics	3
CHE 311	Transport Processes I	3
CHE 315	Chemical Process Thermodynamics	3
MAE 201	Engineering Thermodynamics I	3
MAE 214	Solid Mechanics	3
MAE 308	Fluid Mechanics	3
MSE 301	Introduction to Thermodynamics of Materials	3
TE 303	Thermodynamics for Textile Engineers	3
Select one of the following:		3
TE 463	Polymer Engineering	3
TE 466	Polymeric Biomaterials Engineering	3
Total Hours		22