

B.S. in Engineering Technology, Technology Education

There is a great need for highly qualified teachers of science and technology at the secondary school level. Nationwide, middle and high schools are facing a shortage of technology teachers. The Technology Education (TEED) program is a partnership between NJIT and Rutgers University, Newark, offering a degree in Engineering Technology and an instructional certification with the Teacher of Technology Education (1810) endorsement.

The technology education curriculum provides an in-depth knowledge of various engineering technology disciplines in addition to the required education courses. Students will take a core group of technical courses, and have an ability to concentrate in one or more of the Engineering Technology options. Students will also complete their degree with a 6 credit student teaching course.

The curriculum for the program is shown below. Students who wish to enter the program as a transfer student are typically students with an A.A.S. degree in an Engineering Technology program or an A.S. program in a technical discipline. These students should have completed most or all of the courses, or their equivalents, in the first two years of the program as shown below. In the case of all students, both four-year and transfer, a minimum of 123 credits is required for graduation¹.

(123 credits)

First Year

1st Semester		Credits
CS 106	Roadmap to Computing for Engineers	3
ENGL 101	English Composition: Introduction to Academic Writing	3
PHYS 102	General Physics	3
PHYS 102A	General Physics Lab	1
MATH 138	General Calculus I	3
MET 103	Engineering Graphics and Intro. to CAD	2
ET 101	Introduction to Engineering Technology	0
FYS SEM	First-Year Student Seminar	0
Term Credits		15

2nd Semester

MATH 238	General Calculus II	3
PHYS 103	General Physics	3
PHYS 103A	General Physics Lab	1
ECET 201	Circuits I	3
MET 105	Applied Computer Aided Design	2
ENGL 102	English Composition: Introduction to Writing for Research	3
Term Credits		15

Second Year

1st Semester

MET 235	Statics for Technology	3
CHEM 301	Chemical Technology	3
ECET 215	Introduction to Digital Electronics	3
R300 292	Social Foundation ¹	3
R300 295	Urban Adol Psych	3
Term Credits		15

2nd Semester

MET 237	Strength of Materials for Technology	3
History and Humanities GER 200 level (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-200-level/)		3
ME 215	Engineering Materials and Processes	3
R300 297 & R300 298 & R300 299	21st Century Urban Educator and 21st Century Urban Educator and 21st Century Urban Educator ²	3
IE 224	Production Process Design	3

Technical Elective		3
Term Credits		18
Third Year		
1st Semester		
STS 310	Technology and Human Values	3
R300 390	Understand Ed Eval	3
R300 410	Ict In Secondary Sch	3
CPT 325	Medical Informatics Technology	3
R300 388 & R300 369	Curriculum & Instruct Sem and Curriculum & Instruct: Tech Ed ²	3
Term Credits		15
2nd Semester		
History and Humanities GER 300+ level (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-300-level/)		3
MATH 305 or MNET 315	Statistics for Technology or Industrial Statistics	3
R300 386 & R300 380	Methods of Teaching Sec School and Methods of Teaching Secondary ²	3
CET 313	Construction Procedures I	3
IE 355	Human Factors	3
Term Credits		15
Fourth Year		
1st Semester		
Humanities and Social Science Senior Seminar GER (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/hss-capstone/)		3
CET 317	Construction Computing	3
Technical ET Elective (3xx or 4xx)		3
Technical Elective		3
Term Credits		12
2nd Semester		
CET 314	Construction Procedures II	3
Technical ET Elective (3xx or 4xx)		3
Technical Elective		3
R300 418	Secondary Practicum ³	1
R300 419	Clinical Practice	2
Term Credits		12
Fifth Year		
1st Semester		
R300 487	Student Teaching & Seminar	3
R300 488	Clinical II: St Teaching Exp	3
Term Credits		6
Total Credits		123

¹ Apply Rutgers – Newark Urban Teacher Education Program

² Courses must be taken concurrently.

³ Praxis must be taken prior to taking this class.