

Grainger College of Engineering
University of Illinois Urbana-Champaign
Engineeringtransfers@illinois.edu

DETAILED PROGRAM INFORMATION FOR ALL ENGINEERING SPECIALIZATIONS
IS LOCATED AFTER THIS ARTICULATION CHART

Course Articulation. Source: [Transferology](#) / June 2025

UIUC Course	UIUC Title	BHC Course	BHC Title
ACE 161	Microcomputer Applications [recommended for MS Office skills]	CS 100 or AG 289	Intro to Computers [MS Office skills] or Microcomputer Skills for AGRI
CHEM 102 + CHEM 103	General Chemistry I + General Chemistry Lab I (<i>take both</i>)	CHEM 101	General Chemistry I
CHEM 104 + CHEM 105	General Chemistry II + General Chemistry Lab II (<i>take both</i>)	CHEM 102	General Chemistry II
CHEM 232 + CGEN 233	Organic Chem I	CHEM 203	Organic Chemistry I
CHEM 236	Fundamental Organic Chem I	<i>No equivalent</i>	
CS 101	Intro Computing: Engineering & Science	CIP 250	Java Programming Fundamentals
CS 124	Intro to Computer Science I	CS 121	Intro to Computer Science
CS 128	Intro to Computer Science II	CS 225	Computer Science II
CS 173	Discrete Structures	MATH 161	Discrete Mathematics
CS 225	Data Structures	CS 252	Data Structures
ECE 110	Introduction to Electronics	<i>No equivalent</i>	
ECE 205	Electrical and Electronic Circuits	<i>No equivalent</i>	
ECE 220	Computer Systems & Programming	<i>No equivalent</i>	
ECON 102	Microeconomics Principles	ECON 222	Principles of Microeconomics
ECON 103	Macroeconomics Principles	ECON 221	Principles of Macroeconomics
MATH 213	Basic Discrete Mathematics	MATH 161	Discrete Mathematics
MATH 220	Calculus	MATH 124	Calculus I with Analytic Geometry
MATH 221	Calculus I	<i>No equivalent; take MATH 124</i>	
MATH 225	Introductory Matrix Theory	MATH 230	Linear Algebra
MATH 231	Calculus II	MATH 225	Calculus II with Analytic Geometry
MATH 241	Calculus III	MATH 226	Calculus III with Analytic Geometry
MATH 257	Linear Algebra with Computational Applications	<i>No equivalent</i>	

MATH 284	Intro Differential Systems	MATH 235 (through August 2024)	Differential Equations
MATH 285	Intro Differential Equations	MATH 235 (starting September 2024)	Differential Equations
MATH 286	Intro to Differential Eq Plus	<i>No equivalent</i>	
MATH 415	Applied Linear Algebra (available after transfer)	<i>No equivalent</i>	
MATH 416	Abstract Linear Algebra	<i>No equivalent</i>	
MATH 441	Differential Equations	<i>No equivalent</i>	
MCB 150 + MCB 151	Molecular and Cellular Basis of Life	BIOL 105	General Biology I
ME 170	Computer-Aided Design	GE 101	Engineering Graphics and Geometry
ME 200	Thermodynamics	<i>No equivalent</i>	
MSE 182	Introduction to MatSE	<i>No equivalent</i>	
MSE 206	Mechanics for MatSE	<i>No equivalent</i>	
PHYS 211	University Physics: Mechanics	PHYS 201	Mechanics and Thermal Physics
PHYS 212	University Physics: Elec & Mag	PHYS 202	Electricity and Magnetism
PHYS 213	University Physics: Thermal Physics	<i>No equivalent (see combined PHYS articulation below)</i>	
PHYS 214	University Physics: Quantum Physics	PHYS 214	Modern Physics
PHYS 211 + PHYS 212 + PHYS 213 + PHYS 214	<i>PHYS Combined articulation</i>	PHYS 201 + PHYS 202 + PHYS 214 (take three courses)	Mechanics and Thermal Physics + Electricity and Magnetism + Modern Physics
PSYC 100	Introduction to Psychology	PSYC 101	Intro to Psychology
RHET 105	Writing and Research	ENG 101 + ENG 102 (take both)	Composition I + Composition II
SE 101	Engineering Graphics and Design	Take GE 101	Engineering Graphics and Geometry
TAM 210	Introduction to Statics	<i>No equivalent</i>	
TAM 211	Statics	GE 201	Analytical Mechanics Statics
TAM 212	Introductory Dynamics	GE 202	Analytical Mechanics Dynamics
TAM 251	Intro to Solid Mechanics	GE 205	Elementary Mechanics of Deformable Bodies
Language Other Than English (LOTE)	To meet <u>graduation</u> requirements complete LOTE, in high school or college, through the third level	Through SPAN 201	Intermediate Spanish I

**SEE NEXT PAGE FOR DETAILED PROGRAM INFORMATION
ABOUT ALL ENGINEERING SPECIALIZATIONS**





The Grainger College of Engineering

Explore and Choose Engineering Majors and Minors

<https://grainger.illinois.edu/academics/undergraduate/majors-and-minors>

- **Explore options across 19 top-ranked engineering majors**, and customize your education with minors and dual-degree programs that offer even more flexibility.
- **Take our majors quiz** to discover which of our 19 top-ranked programs match best with your interests.
- Need more time to decide on an engineering major? The Engineering Undeclared (EU) program
- Curriculum Maps

Grainger College of Engineering – Transfer Handbook

<https://transferhandbook.illinois.edu/eng/>

The Grainger College of Engineering is one of the top engineering programs in the world, enabling individuals to improve their quality of life through education, research, innovation, entrepreneurship and societal engagement. Our graduates and faculty transform the world for the better.

Transfer applicants are considered for fall term admission only. Please be aware that you cannot list Grainger Engineering majors as a second choice on your application.

Majors -- includes major-specific details about GPA, required and recommended coursework before transferring including required or recommended course grades, skills and graduation requirements.

[Aerospace Engineering](#)

[Engineering Mechanics](#)

[Agricultural & Biological Engineering](#)

[Environmental Engineering](#)

[Bioengineering](#)

[Industrial Engineering](#)

[Civil Engineering](#)

[Materials Science & Engineering](#)

[Computer Engineering](#)

[Mechanical Engineering](#)

[Computer Science](#)

[Neural Engineering](#)

[Computer Science + Bioengineering](#)

[Nuclear, Plasma & Radiological Engineering](#)

[Computer Science + Physics](#)

[Physics](#)

[Electrical Engineering](#)

[Systems Engineering & Design](#)

The Transfer Handbook Grainger webpage includes important information about the **James Scholar Honors Program, Test-Based Credit, Changing Majors and Second Bachelor's Degree**.