



Transfer Program-to-Program Articulation



*Harrisburg Area Community
Engineering (#4120)*

*Drexel University
Materials & Science Engineering*

REQUIREMENT	COURSE	CRS
Year 1 Fall		
Computer-Aided Drafting And Design	CAD 154	3
General Inorganic Chemistry	CHEM 101	4
English Composition I	ENGL 101	3
Engineering & Engineering Technology Orientation	ENGR 102	2
Calculus I	MATH 121	4
	Credits	16
Year 1 Spring		
Effective Speaking	COMM 101	3
Technical Writing	ENGL 104	3
Calculus II	MATH 122	4
General Inorganic/Qualitative Analysis	CHEM 102	4
Social Science Elective	ELECTIVE	3
	Credits	17
Year 2 Fall		
Statics	ENGR 213	3
Calculus III	MATH 221	4
Physics for Engineers and Scientists I	PHYS 211	4
Differential Equations	MATH 222	4
	Credits	15
Year 2 Spring		
Dynamics	ENGR 214	3
Humanities/Arts Elective	ELECTIVE	3
Physics for Engineers & Scientists II	PHYS 212	4
Linear Algebra	MATH 220	4
	Credits	14
Total Credits		62

REQUIREMENT	COURSE	CRS
Year 1 Fall		
Transfer General Free Elective	TGFE 099	3
General Chemistry	CHEM 101	3.5
Composition and Rhetoric I	ENGL 101	3
Introduction to Engineering Design & Data Analysis	ENGR 111	3
Calculus I	MATH 121	4
	Credits	16.5
Year 1 Spring		
Techniques of Speaking	COM 230	3
Technical Communication	COM 310	3
Calculus II and III	MATH 122 & Math 123	8
General Chemistry II	CHEM 102	4.5
General Ed Elective	ELECTIVE	3
	Credits	21.5
Year 2 Fall		
Statics	MEM 202	3
Multivariate Calculus	MATH 200	4
Fundamentals of Physics I	PHYS 101	4
Differential Equations	MATH 210	4
	Credits	15
Year 2 Spring		
Dynamics	MEM 238	4
General Ed Elective	ELECTIVE	3
Fundamentals of Physics II and III	PHYS 102 & 201	8
Linear Algebra	MATH 201	4
	Credits	19
Total Credits		72

To receive transfer credit, the courses must be substantially equivalent to courses offered in the desired curriculum at Drexel and you must have completed the courses with a grade of C (C=2.0) or better. The transfer courses listed should be used as a general guide and might not be acceptable for every major at the University. We make every effort to keep this guide current but cannot guarantee that every course will be acceptable for transfer. The number of credits you can transfer will be determined by the academic department once you've been accepted

Transfer Electives:

HACC Chem 102	4 Cr	Chem 102	4.5 Cr
HACC Bio 101	4 Cr	Bio 141	4.5 Cr
HACC Bio 206	4 Cr	ENVS 230	3 Cr
HACC Chem 204	4 Cr	Chem 242	4 Cr

HACC Math 220	4 Cr	Math 201	4 Cr
HACC Bio 221	4 Cr	Bio 220	3 Cr
HACC Chem 203	4 Cr	Chem 241	4 Cr
HACC Math 222	4 Cr	Math 210	4 Cr

**Harrisburg Area Comm. College Program Study: Engineering (#4120)****Drexel University Program Study: Materials & Science engineering****REQUIREMENT COURSE CRS****Year 3 Fall**

Fundamentals of Materials	ENGR 220	4
First-Year Engineering Design	ENGR 113	3
Introduction to Civic Engagement	CIVC 101	1
Composition and Rhetoric II		
Advanced Research and Evidence-Based Writing	ENGL 102	3
The Drexel Experience	UNIV E101	1
Career Management and Professional Development	COOP 101	1
	Credits	13

Year 3 Winter

Introduction to Thermodynamics	ENGR 210	3
Fundamentals of Materials II	MATE 230	4
Composition and Rhetoric III: Themes and Genres	ENGL 103	3
Organic Chemistry I	CHEM 241	4
	Credits	14

Year 3 Spring/Summer

COOP Experience

Year 4 Fall

Physical Chemistry and Applications III	CHEC 353	4
Introduction to Polymers	MATE 214	4
Thermodynamics of Materials	MATE 240	4
Structure and Characterization Of Crystalline Materials	MATE 355	3
Mechanical Behavior of Solids	MATE 370	3
	Credits	18

Year 4 Winter

Kinetics of Materials	MATE 245	4
Processing Polymers	MATE 315	4.5
Defects in Solids	MATE 341	3
Technical Elective	ELECTIVE	3
	Credits	14.5

Year 4 Spring/Summer

COOP Experience

REQUIREMENT COURSE CRS**Year 5 Fall**

Statistics and Design of Experiments	CHE 350	3
Advanced Materials Laboratory	MATE 280	4
Processing of Metallic Materials	MATE 366	4.5
Biomedical Materials	MATE 455	3
	Credits	14.5

Year 5 Winter

Processing of Ceramics	MATE 345	4.5
Electronic and Photonic Properties of Materials	MATE 351	4
Material Selection for Industrial Applications	MATE 375	3
Materials Data Analysis	MATE 475	3
	Credits	14.5

Year 5 Spring/Summer

COOP Experience

Year 6 Fall

Senior Project Design I	MATE 491	3
Principles of Microeconomics	ECON 201	4
Engineering Computational Laboratory	MATE 460	4
Cells, Genetics & Physiology	BIO 107	3
Cells, Genetics & Physiology Laboratory	BIO 108	1
	Credits	15

Year 6 Winter

Senior Project Design II	MATE 492	3
Societal Impact Elective	ELECTIVE	4
Technical Elective	ELECTIVE	3
Engineering Ethics	PHIL 315	3
	Credits	13

Year 6 Spring

Senior Project Design III	MATE 493	3
Case Studies in Materials	MATE 410	3
Technical Elective	ELECTIVE	3

Credits 9

Total HACC credits Transfer	72.0
Drexel Credits Completed	125.5

Total All Credits	197.5
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