# College of Science, Technology, Engineering & Mathematics

How can you complete up

in College Credit Plus

that count towards your future major?

#### **Majors include:**

Biochemistry, Biological Sciences, Biology Pre-Med, Biology Pre Vet, Biology Physical Therapy Track, Chemistry, Chemistry Pre-Dental, Chemistry Pre-Pharmacy, Computer Science, Engineering: Chemical, Civil & Environmental, Electrical, Industrial & Systems, Mechanical, Engineering Technology (2 & 4 yr degrees): Civil & Construction, Mechanical and Electrical Technology, Environmental Sciences, Forensic Science, Geology, Information Technology (Application Development Concentration, Data Engineering, Multi-media, Network, Security), Mathematics, Physics, Physics/Astronomy, Pre-Medical

Courses listed are recommended based on degree requirements for the college. Not all courses are offered at the high school. High school options will vary. Specific general education courses may be required for the major. Some courses may have a pre-requisite. View the course catalog (catalog.ysu.edu), or schedule an appointment with your academic advisor (contact information below) for more information.



### All STEM Majors Complete:

ENGL 1549:	Writing I with support	4 ch
or ENGL 1550:	Writing I	3 ch
ENGL 1551:	Writing II	3 ch
CMST 1545:	Communications Foundations	3 ch



#### THE MATH CLASS YOU NEED **DEPENDS ON YOUR MAJOR**

Information Technology

Math 1552 (4 ch) preferred, or Math 1570 or 1571

Geology

Math 1570: Applied Calculus (4 ch)

Biology (excluding Pre-Med/Vet majors) and **Environmental Studies** 

Math 1571 (4ch) preferred or 1570: Applied Calculus I (4 ch)

All other majors (including Pre-Med/Vet)

Math 1571: Calculus I (4 ch)



IF NOT CALC READY, STUDENTS COMPLETE THE FOLLOWING PRIOR TO MATH 1571 (BASED ON PLACEMENT TEST RESULTS):

MATH 1510/11:	College Algebra/Trigonometry	4+3 ch
	- or -	

MATH 1513: Pre-Calculus 5 ch

\*May need additional math depending on major



### **General Education Course Options:** Choose three to four, at least one in each category

#### **Social Science**

HIST 1501:	American Dreams	3 ch
HIST 1500:	Discovering World History	3 ch
PSYC 1560:	General Psychology	4 ch
ECON 2610:	Principles I: Microeconomics	3 ch

#### **Arts & Humanities**

ENGL 2618:	American Literature & Diversity	3 ch
MUHL 2621:	Music Literature & Appreciation	3 ch
PHIL 2625:	Intro to Professional Ethics	3 ch
PHIL 2626:	Engineering Ethics	3 ch

#### Science

BIOL 2601/L:	Molecules and Cells w/Lab	3+1 ch
CHEM 1515/L:	General Chem I w/Lab	3+1 ch
ENST 1500/L:	Intro to Enviro Studies w/Lab	3+1 ch
PHYS 1501/L:	Fundamentals 1/Lab	4+1 ch



## **Introductory Major Courses:**

#### Select one to three courses based on your major

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ASTR 1504:	Descriptive Astronomy	3 ch	ENST 2600/L:	Fndtns of Enviro Studies w/lab	3+1 ch
<b>ASTR 2609:</b>	Moon and Planets	3 ch	ENTC 1505:	Engineering Tech Concepts	4 ch
BIOL 2602/L:	Organisms and Cells w/Lab	3+1 ch	FSCI 1510:	Survey of Forensic Science	3 ch
CHEM 1501:	Intro to Chemistry	3 ch	GEOL 1500:	Environmental Geology	4 ch
CHEM 1516/L:	General Chemistry II w/Lab	3+1 ch	GEOL 1505/L:	Physical Geology w/ Lab	4 ch
CSIS 1590:	Survey of Computer Science		MATH 1572:	Calculus 2	4 ch
	& Info Systems	3 ch	MATH 2673:	Calculus 3	4 ch
CSIS 1595/L:	Fundamentals of Programming		PHYS 2610/L:	General Physics I w/Lab	4+1 ch
	& Problem Solving 1 w/Lab	2+1 ch	PHYS 2611/L:	General Physics II w/Lab	4+1 ch
CSIS 2610/L:	Proa & Problem Solvina w/Lab	3+1 ch		•	

YOUNGSTOWN STATE UNIVERSITY



**Ouestions?** STEM CCP Academic Advisor: Debora Kurcharski, dlkucharski@ysu.edu CCP Staff: ccp@ysu.edu

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