

Applied Computing Core Course

Fall 2022 Suggested Schedule

Total Credit Hours 120

Freshman – 1st Semester		15
FYET102A	FYS: Intro to Tech & Innov (S&BS + FYS)	3
COMM111	Public Speaking	3
MATH111	College Algebra	3
ENGL101	College English I	3
AC121	Cybersecurity Awareness (fall only)	3

Freshman – 2nd Semester		15
PSY111	General Psychology (S&BS)	3
MATH123	College Trig P: MATH111	3
ENGL102	College English II P: ENGL101	3
ENGR220	Applied Analog and Digital Electronic (spr only) P: MATH111	3
AC222	Applied Computing and Networks 1 (spr only) P: MATH111	3

Sophomore – 1st Semester		15
PHYS213	General College Physics I P: MATH123	5
AC201	Introductory Design Project P: WSUE102A, ENGR302 or ID300	1
AC321	Applied Computing and Networks 2 (fall only) P: AC222	3
ECON201	Principles of Macro Econ (S&BS) or IME255	3
	TE - Recommend PHIL125 Introductory Logic	3

Sophomore – 2nd Semester		17
PHYS214	General College Physics II P: PHYS213	5
PSY323	Social Psychology (S&BS) P: PSY111	3
	FA (at 300 level or above unless STAT370 is taken)	3
AC322	Applied Programing & Scripting (spr only) P: AC222	3
AC324	Applied Web Apps & DB Dev (spr only) P: AC222	3

Junior – 1 st Semester		14
AC301	Intermediate Project Design P: AC201 or ENGR205	2
PSY301	Psychological Statistics P: PSY111 (If taken FA must be 300 level) or	3
STAT370	Elementary Statistics P: MATH111	
	Elective Certificate or TEs	9

Junior – 2nd Semester		16
AC326	Cyber Operations (spr only) p: AC121, AC321 & AC322	4
PHIL345	Ethics and Computers (Humanities)	3
	Elective Certificate or TEs	9

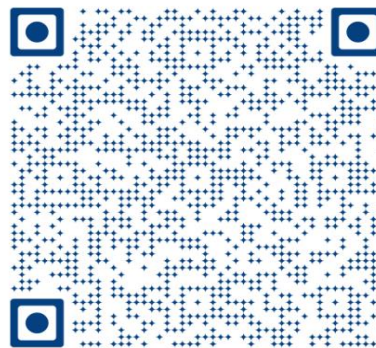
Senior – 1st Semester		15
AC 401	Senior Design Project I (fall only) P: AC301 or Dept consent	3
	Elective Certificate or TEs	12

Senior – 2nd Semester		13
AC 402	Senior Design Project II (Spr only) P: AC401	3
	Elective Certificate or TEs	10

NOTES:

- All first-time-in-college students must take FYET 102A within their first two semesters.
- Transfer students need take ENGR205 plus 1 extra TE credit hour, to replace FYET102A and AC201
- Students must fulfill the Engineer 2020 requirements.
- Students selecting PSY 301 will need to ensure they have a total of 9 credit hours of 300 level or above general education classes.
- Student complete at least three BS-AP Certificates
- Student must take additional Technical Electives from and approved list to make a total or 120 credit hours
- All engineering prerequisites need to be completed with C or higher

Find out more:



Applied Computing Certificate Selections

Fall 2022 Schedule

IT Fundamentals Certificate			
1st Semester			
AC222	Applied Computing and Networks 1 (spr only)	P: MATH111	3
2nd Semester			
AC321	Applied Computing and Networks 2 (fall only)	P: AC222	3
3rd Semester			
AC322	Applied Programing & Scripting (spr only)	P: AC222	3

Pre-Requisites for Cyber Security Essentials			
AC121	Cybersecurity Awareness		3
	IT Fundamentals Certificate		9
AC324	Applied Web Apps & DB Dev (spr only)	P: AC222	3
ENGR220	Applied Analog and Digital Electronic (spr only)	P: MATH111	3
AC326	Cyber Operations	P: AC121, AC321 & AC322	4

Cybersecurity Essentials Certificate			
Senior – 1st Semester			
AC461	Digital Forensics (fall only)	P: AC326	3
AC463	Cyber Risk Management (fall only)	P: AC326	3
Senior – 2nd Semester			
AC462	Cyber Physical Systems (spr only)	P: ENGR220, AC326	4
AC464	Web Application Security (spr only)	P: AC324, AC326	3

Data and Web Security Certificate			
Junior – 1 st Semester			
BDAM162	Business Software: Excel	P/C: MATH111	1
Senior – 1st Semester			
AC463	Cyber Risk Management (fall only)	P: AC326	3
MIS605	Systems Analysis & Design (fall only)	P: junior standing	3
Senior – 2nd Semester			
AC464	Web Application Security (spr only)	P: AC324, AC326	3
MIS696	Management of the IS Function (spr only)	P/C: MIS605	3

Cyber-Physical Systems Certificate			
Junior – 1 st Semester			
MATH242	Calculus I	P: MATH123	5
Junior – 2nd Semester			
ENGT320	Circuits Technology (spr only)	P: MATH 242 with "C-"	4
Senior – 1st Semester			
ENGT361	Industrial Controls & Instrumentation (fall only)	P: ENGT 320 & MATH 243	4
Senior – 2nd Semester			
AC462	Cyber Physical Systems (spr only)	P: ENGR220, AC326	4

Human Factors in Tech and Security Certificate			
Junior – 1 st Semester			
PSY323	Social Psychology (required if not taken as Gen Ed)	P: PSY111	3
AC363	Human Threats to Cyber Security	P: AC121	3
Junior – 2nd Semester			
PSY405	Human Factors Psychology	P: PSY111	3
Senior – 1st Semester			
AC461	Digital Forensics (fall only)	P: AC326	3
AC463	Cyber Risk Management (fall only)	P: AC326	3

Applied Data Analysis Certificate			
Junior – 1 st Semester			
MATH243	Calculus II	P: MATH242	5
MIS600	Database Management Systems	P: BADM162	
Junior – 2nd Semester			
ENGT354	Statistical Process Control	C: MATH243 or	3
STAT460	Elem Probability and Math stats	P: MATH243 or	
IME254	Engr Probability/Statistics I	P: MATH243	
Senior – 1st Semester			
ENGT441	Analysis of Decision Processes	P: ECON201 or IME255	3
Senior – 2nd Semester			
ENGT572	Applied Machine learning		3

NOTES:

Certificates require that a cumulative grade point average of at least 2.000 must be maintained for all courses comprising the certificate and no class has a grade below C