

Information Technology Semester Curriculum  
IT+MSIT program - Updated 3/31/2017

University of Cincinnati/CECH

Fall (S1)			Spring (S2)		
IT 1050	Fundamentals of IT	3	IT 1050	Track Course 1	3
IT 1080C	Computer Networking	3	IT 2060C	Database Management I	3
IT 1090C	Computer Programming I	3	IT 1081C	System Administration	3
ENGL 1001	English Composition	3	IT 2040C	Fund. of Web Development Intro to Interpersonal Communication	3
MATH 1026	Pre-Calculus	5	COMM 1076	Communication	3
PD 1010	Intro to COOP for CECH	1	IT2030C+	Info. Sec. and Assurance	3
		<u>18</u>			<u>18 /15</u>

Fall (S3)			Summer (S4)		
IT 3060C	Track Course 2	3	IT 3060C	Track Course 3	3
IT 2020	Database Management II	3	IT 2030C+	Info. Sec. and Assurance	3
IT 1051C	Implications of IT	3		Advisor Approved Elective	3
HPE 2071	Fund. of Digital Media	3	ENGL 2089	Interm. Compos.	3
	Applied Statistics	3	MATH 1071	Discrete Math	3
	Science Elective*	3		Science Elective*	3
		<u>18</u>			<u>18 /15</u>

Spring (S5)			Fall (S6)		
IT 2021	Track Course 4	3	IT 2021	Track Course 5	3
			ENGL 4091	Writing for Business	3
			OR		
			ENGL 4092	Technical and Scientific Writing	3
IT3020	Human Comp. Interaction Elective**	3	IT 4020	Management in IT	3
				Advisor Approved Elective	3
IT7040	Systems Analysis & Design	3	IT7001	Information Technology Graduate Seminar	3
	MSIT Advisor Approved Technical Elective 1	3	IT7XXX	MSIT Tech Track 1	3
	Human Computer Interaction and Usability	3			
		<u>18</u>			<u>18</u>

Summer (S7)			Fall (S8)			Spring (S9)		
	Gen Ed Elective**	3	IT 5001	Senior Design Proj Mgt I	3	IT 5002	Senior Design Proj Mgt II	3
	Gen Ed Elective**	3		Track Course 6	3		Track Course 8	3
	Advisor Approved Elective	3		Track Course 7	3	IT7XXX	MSIT Tech Track 2	3
			IT7010	Information Technology Research Methods	3	IT7XXX	MSIT Tech Track 3	3
	Advisor Approved Elective	3	IT7XXX	IT Elective	3	IT7XXX	IT Elective	3
	MSIT Advisor Approved Technical Elective 2	3						
		<u>15</u>			<u>15</u>			<u>15</u>

Total Credits 150

**BSIT Tracks**

**Networking/Systems Track**

- IT 2035C Network Infrastructure Management (1)
- IT 3036C Enterprise Systems Administration (2)
- IT 3037C Cloud Computing (3)
- IT 3071C Network Security (4)
- IT 3038C Scripting Languages (5)
- IT 4037C Special Topics in Networking/Systems (6)
- IT 5031C Senior Design Networking/Systems Technical Practicum I (7)
- IT 5032C Senior Design Networking/Systems Technical Practicum II (8)

**Software Application Development Track**

- IT 2045C Computer Programming II (1)
- IT 3045C Contemporary Programming (2)
- IT 3048C Mobile Device Programming (3)
- IT 3046C Client-Side Web Programming (4)
- IT 3047C Web Server App. Development (5)
- IT 4045C Enterprise Application Development (6)
- IT 5041C Senior Design Software Application Development Technical Practicum I (7)
- IT 5042C Senior Design Software Application Development Technical Practicum II (8)

**Cybersecurity Track**

- IT 2035C Network Infrastructure Management (1)
- IT 3071C Network Security (2)
- IT 3072C Computer and Network Forensics (3)
- IT 3075C Network Monitoring and Intrusion Prevention Systems (4)
- IT 4076C Penetration Testing (5)
- IT 4077C Special Topics in Cybersecurity (6)
- IT 5071C Senior Design Cybersecurity Technical Practicum I (7)
- IT 5072C Senior Design Cybersecurity Technical Practicum II (8)

**MSIT Tracks**

**Cybersecurity Track**

- IT7020 Principles of Cybersecurity 3
- IT7021 Enterprise Security and Forensics 3
- IT7022 Software Application Security 3

**Mobile and Social App Development**

- IT7023 Technologies for Social Networking 3
- IT7024 Technologies for Mobile Applications 3
- IT7025 Usability for Mobile Applications 3

**Game Development**

- IT7030 Games for Learning & Simulation 3
- IT7031 Advanced Technologies for Game Development 3
- IT7032 Advanced Multi-player Games 3

**IT Infrastructure**

- IT7027 IT Infrastructure Sustainability 3
- IT7028 Advanced Storage Technologies 3
- IT7029 Advanced Systems Administration 3

**Information Technology Co-op schedule**

	Freshman		Sophomore			Pre-Junior			Junior			Senior		
	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring
<b>Group A</b>	S1	S2	C1	S3	C2	S4	C3	S5	C4	S6	C5	S7	S8	S9

\*Students must meet with their co-op advisor within the first three weeks of the semester that precedes their first planned co-op semester. With prior approval of the academic and co-op advisors, students may take up to six credit hours of courses while on co-op. Students must complete and pass all coursework for S1 and S2 and have a minimum 2.0 GPA to be eligible to co-op.

\*\* Science Electives must be from BIOL, CHEM, PHYS or GEOL.

\*\*\* General Education Electives must be from chosen from courses designated as Fine Arts, Historical Perspectives, Humanities and Literature, or Social Sciences. Each elective must represent a different area.

†Students in the Cybersecurity track must take IT2030 in the spring of their freshmen year (S2). All other students will take in their second year (S4)

++ Cybersecurity track students should take C1001 Introduction to Criminal Justice and POL2035 Cybersecurity Strategy and Policy as their first two advisor approved electives

\*\*\*Students are considered undergraduate CECH students for the first four years of the program (S1 to S6 and C1 to C5), will become graduate students in the fifth year of the program (S7, S8, and S9), and will graduate with a Bachelor of Science in Information Technology and Master of Science in Information Technology at the end of the spring semester of the fifth year.

Students in the Bachelor of Science in Information Technology may use the prior learning assessment process (<http://www.uc.edu/testing/services/pla.html>) to receive advanced standing for a maximum of 4 semester IT courses for which they have prior experience. Please speak to the academic advisor or a faculty member before applying.