

Illinois Tech/City Colleges Curriculum Crosswalk

Courses to be completed at Chicago City Colleges leading to an Associate in Applied Science in Cybersecurity and at Illinois Institute of Technology leading to a Bachelor of Information Technology and Management with a Specialization in Systems Security

Courses to be completed at Chicago City Colleges

<i>Code</i>	<i>Title</i>	<i>Hours</i>	<i>Illinois Institute of Technology Transfer</i>
General Education Coursework			
ENGLISH 101	Composition	3	COM 101
Fine Arts and Humanities		3	Select one course from Comparative Religion, Fine Arts, History, Humanities, Literature, or Philosophy (not PHIL 105)
Social and Behavioral Sciences		3	Select one course from Anthropology, Economics (not ECON 133), Geography, Political Science, Psychology (not PSYCH 240), Social Sciences, or Sociology
Physical Sciences and Life Sciences		3	Select one course from Astronomy, Biology, Botany, Chemistry or Physics
Mathematics (Math 118 or higher)		3	Select MATH 125 or MATH 146
Required Program Core			
CIS 103	Fundamentals of Programming	3	Free elective
CIS 116	Operating System I	3	Free or technical elective
CIS 255	Operating Systems II	3	ITM 301 Intro to Contemporary Operating Sys & Hardware I
COMPSFI 101 TEC 121 Internetworking I	Networking Essentials or NET	3	Free or technical elective
COMPSFI 102	Information Security Essentials	3	ITMS 478 Cyber Security Management
COMPSFI 202	Cybercrime and Incident Response	3	ITMS upper-level elective
COMPSFI 212	Scripting for Cybersecurity	3	ITMO 417 Shell Scripting for System Administration
COMPSFI 213	Ethical Hacking	3	ITMS 443 Vulnerability Analysis and Control
COMPSFI 214	Information Security Systems Analysis	3	ITMS 446 Active Cyber Defense
NET TEC 122	Internetworking II	3	ITMO 340 Introduction to Data Networks and the Internet
NET TEC 245	Cloud Computing and Services	3	ITMO 444 Cloud Computing Technologies

Required Work-Based Learning Courses		
CIS 260 Computer Information Systems Field Project or CIS 265 Computer Information Systems Internship	3	Free or technical elective
Program Electives		
Select a minimum of 9 credit hours of program electives	9	See program electives below
Total Hours	60	60 hours transfer to Illinois Institute of Technology

Program Electives for transfer to Illinois Tech Bachelor of Information Technology and Management

<i>Code</i>	<i>Title</i>	<i>Hours</i>	<i>Illinois Institute of Technology Transfer</i>
Course List			
CIS 142	C++ Object Oriented Programming I	3	ITM 312 Introduction to Systems Software Programming
(CIS 142	Python Object Oriented Programming I)	3	ITM 312 Intro to Open Source Application Development
CIS 144	Java Object Oriented Programming I	3	ITM 311 Introduction to Software Development
CIS 244	Java Object Oriented Programming II	3	ITMD 411 Intermediate Software Development
COMPSFI 205	Cyber Forensics	3	ITMS 438 Cyber Forensics

Students may transfer up to 68 hours taken at Chicago City Colleges to Illinois Institute of Technology. Additional suggested coursework could be a second mathematics course and a four-credit-hour laboratory science course. **Courses to be completed at Illinois Institute of Technology.**

<i>Code</i>	<i>Title</i>	<i>Hours</i>	<i>Notes</i>
Core Curriculum Courses			
	Humanities/Social Science lower-level course	3	
	Humanities upper-level courses	6	
	Social or Behavioral Science upper-level courses	6	
	Natural Science or Engineering	7	Including transferred coursework, two Natural Science or Engineering courses must be in the same subject area and one must be in a different subject area
	Mathematics	3	MATH 180 or a Statistics Elective
	Inter-Professional Project (IPRO)	6	
Information Technology and Management Major Required Courses			
ITM 100	Intro to Info Technology as a Profession	3	
ITMD 321	Data Modeling and Applications	3	
ITMD 361	Fundamentals of Web Development	3	
ITMD 362	Human-Computer Interaction & Web Design	3	
ITMD 411	Intermediate Software Development	3	Substitute ITMS 438 Cyber Forensics if CIS 244 is completed
ITMM 471	Project Management for ITM	3	
ITMO 356	Intro to Open Source Operating Systems	3	
ITMS 448	Cyber Security Technologies	3	
ITMT 430	System Integration	3	
Systems Security Specialization Elective			

<i>Select one course from</i>			
	ITMO 433	Enterprise Server	
Admin	ITMO 441	Network Admin &	3
Operations			3
	ITMO 450	Enterprise End-User Sys	3
Admin	ITMO 453	Open Source Server Admin	3
Total			67
Total for Bachelor of Information Technology & Management			127

The **Bachelor of Information Technology and Management** at Illinois Institute of Technology has been designated by the U.S. National Security Agency and the Department of Homeland Security as a **National Center of Academic Excellence in Cyber Defense Education**.

Courses to be completed at Chicago City Colleges leading to a Basic Certificate in Cybersecurity and at Illinois Institute of Technology leading to a Bachelor of Information Technology and Management with a Specialization in Systems Security

<i>Code Title Hours Illinois Institute of Technology Transfer Required Program Core</i>	18
CIS 103 Fundamentals of Programming 3 Free elective	
CIS 116 Operating System I 3 Free or technical elective	
CIS 255 Operating Systems II 3 ITM 301 Intro to Contemporary Operating Sys & Hardware I	
COMPSFI 101 Networking Essentials 3 Free or technical elective or NET TEC 121 Internetworking I	
COMPSFI 102 Information Security Essentials 3 ITMS 478 Cyber Security Management	
COMPSFI 202 Cybercrime and Incident Response 3 ITMS upper-level elective	

Total for Basic Certificate in Cybersecurity 18 18 hours transfer to Illinois Institute of Technology

Courses to be completed at Chicago City Colleges

Students may transfer up to 68 hours taken at Chicago City Colleges to Illinois Institute of Technology. Additional suggested coursework could be two mathematics courses including statistics and discrete mathematics, ten hours of science including a four credit-hour laboratory science course, and at least nine hours of humanities and social science. **Completion of sufficient additional courses to earn the Advanced Certificate in Cybersecurity as well as an Associate of Arts degree - or- an Associates of Science degree from CCC is needed.**

Courses to be completed at Illinois Institute of Technology

Code Title Hours Notes

Core Curriculum Courses 43

Humanities/Social Science lower-level courses 9

Humanities upper-level courses 6

Social or Behavioral Science upper-level courses 6

Natural Science or Engineering 10 Two Natural Science or Engineering courses must be in the same subject area and one must be in a different subject area

Mathematics: Statistics 3 Select one course from BUS 221, MATH 225, MATH 425, or PSYC 203

Mathematics: Discrete Mathematics 3 Select one course from MATH 180 or MATH 230

Inter-Professional Project (IPRO) 6

Information Technology and Management Major Courses 36

ITM 100 Intro to Info Technology as a Profession 3

ITM 311 Introduction to Software Development 3

ITM 313 Intro to Open Source Application Development 3

ITMD 321 Data Modeling and Applications 3

ITMD 340 Intro Data Networks & the Internet 3

ITMD 361 Fundamentals of Web Development 3

ITMD 362 Human-Computer Interaction & Web Design 3

ITMD 411 Intermediate Software Development 3

ITMM 471 Project Management for ITM 3

ITMO 356 Intro to Open Source Operating Systems 3

ITMS 448 Cyber Security Technologies 3

ITMT 430 System Integration 3

Code Title Hours Notes

Systems Security Specialization Electives 12

Select one course from

- ITMO 433 Enterprise Server Admin 3
- ITMO 441 Network Admin & Operations 3 ITMO
- 450 Enterprise End-User Sys Admin 3 ITMO 453 Open
- Source Server Admin 3

Select two courses from any ITMS electives 6

Select one courses from any ITM elective 3

Minor Electives 15

Select minor electives 15

Free Elective 3

Select a free elective 3

Total 109

Total for Bachelor of Information Technology & Management 127

Courses to be completed at Chicago City Colleges leading to an Advanced Certificate in Cybersecurity and at Illinois Institute of Technology leading to a Bachelor of Information Technology and Management with a Specialization in Systems Security

Courses to be completed at Chicago City Colleges

<i>Code</i>	<i>Title</i>	<i>Hours</i>	<i>Illinois Institute of Technology Transfer</i>
Advanced Certificate in Cybersecurity Required Program Core		27	
CIS 103	Fundamentals of Programming	3	Free elective
CIS 116	Operating System I	3	Free or technical elective
CIS 255	Operating Systems II	3	ITM 301 Intro to Contemporary Operating Sys & Hardware I
COMPSFI 101 121	Networking Essentials or NET TEC Internetworking I	3	Free or technical elective
COMPSFI 102	Information Security Essentials	3	ITMS 478 Cyber Security Management
COMPSFI 202	Cybercrime and Incident Response	3	ITMS upper-level elective
COMPSFI 212	Scripting for Cybersecurity	3	ITMO 417 Shell Scripting for System Administration
COMPSFI 213	Ethical Hacking	3	ITMS 443 Vulnerability Analysis and Control
NET TEC 122	Internetworking II	3	ITMO 340 Introduction to Data Networks and the Internet
Program Electives		3	
Select a minimum of 3 credit hours of program electives		3	See program electives below
Total for Advanced Certificate in Cybersecurity		30	30 hours transfer to Illinois Institute of Technology

Advanced Certificate in Cybersecurity Program Electives for transfer to Illinois Tech Bachelor of Information Technology & Management

<i>Code</i>	<i>Title</i>	<i>Hours</i>	<i>Illinois Institute of Technology Transfer</i>
Course List			
CIS 142	C++ Object Oriented Programming I	3	ITM 312 Introduction to Systems Software Programming
(CIS 142	Python Object Oriented Programming I)	3	ITM 313 Intro to Open Source Application Development
CIS 144	Java Object Oriented Programming I	3	ITM 311 Introduction to Software Development

Associate of Science (AS) courses for transfer to Illinois Tech Bachelor of Information Technology and Management

<i>Code</i>	<i>Title</i>	<i>Hours</i>	<i>Illinois Institute of Technology Transfer</i>
General Education		37	
ENGLISH 101	Composition	3	COM 101 - Writing in the University
ENGLISH 102	Composition	3	Free elective
SPEECH 101	Fundamentals of Speech Communication	3	COM 428 - Verbal and Visual Communication (Free Elective)
MATH 125	Introductory Statistics	3	Mathematics requirement

MATH 146	Discrete Mathematics	3	Mathematics requirement
Fine Arts & Humanities		6	HUM 20X and two Core and/or free electives
Social and Behavioral Sciences		6	Core and/or free electives
Physical Sciences & Life Sciences		10	Natural Science or Engineering Core electives Two courses must be in the same subject area
Advanced Certificate in Cybersecurity applied as AA electives		30	
Total Courses transferred to Illinois Institute of Technology		67	

Courses to be completed at Illinois Institute of Technology

<i>Code</i>	<i>Title</i>	<i>Hours</i>	<i>Notes</i>
Core Curriculum Courses		18	
Humanities upper-level courses		6	
Social or Behavioral Science upper-level courses		6	
Inter-Professional Project (IPRO)		6	
Information Technology and Management Major Courses		30	
ITM 100	Intro to Info Technology as a Profession	3	
ITM 311 or ITM 313	Introduction to Software Development Intro to OpenSource Application Development	3	
ITMD 321	Data Modeling and Applications	3	
ITMD 361	Fundamentals of Web Development	3	
ITMD 362	Human-Computer Interaction & Web Design	3	
ITMD 411	Intermediate Software Development	3	
ITMM 471	Project Management for ITM	3	
ITMO 356	Intro to Open Source Operating Systems	3	
ITMS 448	Cyber Security Technologies	3	
ITMT 430	System Integration	3	
Systems Security Specialization Electives		6	
<i>Select one course from</i>			
	ITMO 433 Enterprise Server Admin	3	
	ITMO 441 Network Admin & Operations	3	
	ITMO 450 Enterprise End-User Sys	3	
Admin	ITMO 453 Open Source Server Admin	3	
<i>Select one course from any ITMS elective</i>		3	
Free Elective Courses		6	
<i>Select six hours from any elective courses</i>		6	
Total		60	
Total for Bachelor of Information Technology & Management		127	

Students should consult Transferology (<https://www.iit.edu/admissions-aid/undergraduate-admission/transfer-students/transfer-credit-and-policies/transferology>) to ensure at least one Fine Arts & Humanities course will transfer as HUM 20X to Illinois Institute of Technology. Students may transfer up to 68 hours taken at Chicago City Colleges to Illinois Institute of Technology.

Courses to be completed at Chicago City Colleges leading to an Advanced Certificate in Cybersecurity and at Illinois Institute of Technology leading to a Bachelor of Information Technology and Management with a Specialization in Systems Security

Courses to be completed at Chicago City Colleges

<i>Code</i>	<i>Title</i>	<i>Hours</i>	<i>Illinois Institute of Technology Transfer</i>
Required Program Core		27	
CIS 103	Fundamentals of Programming	3	Free elective
CIS 116	Operating System I	3	Free or technical elective
CIS 255	Operating Systems II	3	ITM 301 Intro to Contemporary Operating Sys & Hardware I
COMPSFI 101 I	Networking Essentials or NET TEC 121 Internetworking I	3	Free or technical elective
COMPSFI 102	Information Security Essentials	3	ITMS 478 Cyber Security Management
COMPSFI 202	Cybercrime and Incident Response	3	ITMS upper-level elective
COMPSFI 212	Scripting for Cybersecurity	3	ITMO 417 Shell Scripting for System Administration
COMPSFI 213	Ethical Hacking	3	ITMS 443 Vulnerability Analysis and Control
NET TEC 122	Internetworking II	3	ITMO 340 Introduction to Data Networks and the Internet
Program Electives		3	
Select a minimum of 3 credit hours of program electives		3	See program electives below
Total for Advanced Certificate in Cybersecurity		30	30 hours transfer to Illinois Institute of Technology

Program Electives for transfer to Illinois Tech Bachelor of Information Technology and Management

<i>Code</i>	<i>Title</i>	<i>Hours</i>	<i>Illinois Institute of Technology Transfer</i>
Course List			

CIS 142	C++ Object Oriented Programming I	3	ITM 312 Introduction to Systems Software Programming
(CIS 142	Python Object Oriented Programming I)	3	ITM 313 Intro to Open Source Application Development
CIS 144	Java Object Oriented Programming I	3	ITM 311 Introduction to Software Development

Students may transfer up to 68 hours taken at Chicago City Colleges to Illinois Institute of Technology. Additional suggested coursework could be two mathematics courses including statistics and discrete mathematics, ten hours of science including a four



credit-hour laboratory science course, and at least nine hours of humanities and social science. **Completion of sufficient additional courses to earn an Associate of Arts degree from CCC is highly recommended and encouraged.**

Courses to be completed at Illinois Institute of Technology

<i>Code</i>	<i>Title</i>	<i>Hours</i>	<i>Notes</i>
Core Curriculum Courses		43	
Humanities/Social Science lower-level courses		9	
Humanities upper-level courses		6	
Social or Behavioral Science upper-level courses		6	
Natural Science or Engineering		10	Two Natural Science or Engineering courses must be in the same subject area and one must be in a different subject area
Mathematics: Statistics		3	Select one course from BUS 221, MATH 225, MATH 425, or PSYC 203
Mathematics: Discrete Mathematics		3	Select one course from MATH 180 or MATH 230
Inter-Professional Project (IPRO)		6	

Courses to be completed at Illinois Institute of Technology (continued)

<i>Code</i>	<i>Title</i>	<i>Hours</i>	<i>Notes</i>
Information Technology and Management Major Courses		36	
ITM 100	Intro to Info Technology as a Profession	3	
ITM 311	Introduction to Software Development	3	or ITM 313 Intro to Open Source Application Development
ITMD 321	Data Modeling and Applications	3	
ITMD 361	Fundamentals of Web Development	3	
ITMD 362	Human-Computer Interaction & Web Design	3	
ITMD 411	Intermediate Software Development	3	
ITMM 471	Project Management for ITM	3	

ITMO 356	Intro to Open Source Operating Systems	3
ITMS 448	Cyber Security Technologies	3
ITMT 430	System Integration	3
Systems Security Specialization Electives		6
<i>Select one course from</i>		
ITMO 433	Enterprise Server Admin	3
ITMO 441	Network Admin & Operations	3
ITMO 450	Enterprise End-User Sys Admin	3
ITMO 453	Open Source Server Admin	3
<i>Select one course from any ITMS elective</i>		3
Free or Minor Electives		18
<i>Select free or minor electives</i>		18
Total		97
Total for Bachelor of Information Technology & Management		127