

# Computer and Internetworking Technologies (CIT)



College of DuPage and Lewis University

## 3+1 Bachelor of Science Degree Program in Computer Science

A convenient, affordable and streamlined approach to earn the Bachelor of Science in Computer Science degree.

### Program Overview

- All classes are held at the College of DuPage Glen Ellyn campus.
- The 32 Lewis University credit hours are offered at a discounted tuition rate.
- For students earning an Associate in Applied Science in Computer Internetworking Technologies-Computer and Information Technology, the program consists of 132 credit hours, including 100 credit hours of College of DuPage courses and 32 credit hours of Lewis University coursework.

### Who can enroll in the program?

- Students who have completed an Associate in Applied Science degree in Computer Internetworking Technologies-Computer and Information Technology and have taken the necessary additional general education courses.
- New students interested in pursuing a Bachelor of Science degree in Computer Science offered by Lewis University at College of DuPage.
- Students who graduated from College of DuPage and went elsewhere can be considered for admission for this 3+1 program if they complete any necessary prerequisites. A transcript evaluation needs to be completed by both schools.

### The Advantage

The 3+1 program allows students to complete their AAS degree from College of DuPage. Once completed, our students are allowed to take additional courses beyond their degree from COD paying our much lower tuition rates. The final year of classes are taught by Lewis University faculty and are offered on College of DuPage's campus at a significantly reduced rate, making the goal of continuing an education a reality for more students. This program exemplifies College of DuPage's mission to make education more affordable for its students while stressing academic quality, first-class faculty and extraordinary learning environments.

*(Academic Plan on back.)*

### For more information contact:

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## 3+1 Agreement between College of DuPage and Lewis University

AAS degree in Computer and Internetworking Technology (CIT.AAS.CIT)–Computer and Information Technology/  
Bachelor of Science degree in Computer Science

### Academic Plan

COLLEGE OF DUPAGE AAS DEGREE		CREDITS	LEWIS UNIVERSITY		CREDITS
<i>Courses for Years 1 and 2</i>			<i>Courses for Year 4</i>		
<b>General Education</b>		<b>(21 to 22 Credits)</b>			
ENGLI 1101	English Composition I	3	MATH 24000	Applied Calculus	4
SPEEC 1100	Fundamentals of Speech Communication	3	MATH 30700	Applied Linear Algebra	3
Physical or Life Science ( <i>must have a lab component</i> )		4 to 5	CPSC 24500	Object Oriented Programming	3
MATH 1431	Pre-Calculus	5	CPSC 34000	Algorithms and Data Structures	3
Humanities and Fine Arts		3	MATH 31000	Discrete Mathematics	4
Social and Behavioral Sciences		3	CPSC 35000	Operating Systems	3
<b>Program Requirements</b>		<b>(38 credits)</b>	CPSC 49300	Computer Infrastructure Capstone	3
CIT 1100	IT Fundamentals	2	CPSC 42500	Encryption	3
CIT 1111	Computer and Hardware Maintenance	3	SOCI 29000	Diversity and Social Justice	3
CIT 1112	Advanced System Maintenance	3	THEO 1000	Search For Faith	3
CIT 1121	Networking Fundamentals	3	<b>Credit hours completed through Lewis University</b>		<b>32</b>
CIT 1122	Routing Protocols and Concepts	3	<b>Total credit hours required to complete the entire program:</b>		
CIT 1123	LAN Switching and Wireless	3	<b>100+32=132</b>		
CIT 1124	Accessing the WAN	3			
CIT 1612	Configuring Windows	3			
CIT 1613	Enterprise Desktop PC Support	3			
CIT 1640	Security Plus	3			
<b>OR</b>					
CIT 2251	CCNA Security	3			
CIT 1645	Internet Telephony				
<b>OR</b>					
CIT 2410	CCNA Voice	3			
CIT 1710	Server Plus	3			
CIT 2710	Capstone: Computer Network Integration	3			
<b>Program Electives</b>		<b>(8 Credits)</b>			
*CIS 1400	Programming Logic and Technique	4			
CIT elective (2000-level)		4			
*Students will need to request course substitutions from the CIT Faculty Coordinator, Dr. Felix Davis, to allow for CIS courses to be taken as Program Electives.					
<b>Year 3 Courses Beyond the Associate's Degree</b>		<b>(33 Credits)</b>			
<b>Emphasis Sequence</b>					
Students must complete one of the following sequences.					
<u>C++</u>					
CIS 2541	C++ Language Programming	4			
CIS 2542	Advanced C++ Programming	4			
<u>Java</u>					
CIS 2571	Introductions to Java	4			
CIS 2572	Collections in Java	4			
<u>Python</u>					
CIS 2531	Intro to Python Programming	4			
CIS 2532	Advanced Python Programming	4			
CIS 2420	Microprocessor Assembly Language	4			
ENGLI 1102	English Composition II	3			
IAI Physical or Life Science		3			
Humanities and Fine Arts ( <i>select IAI approved courses</i> )		6			
Social and Behavioral Sciences ( <i>select IAI approved courses</i> )		6			
PHIL 1110	Ethics	3			
<b>Minimum credit hours transferring from COD</b>		<b>100-101</b>			

### Important Notes

- Students must complete the associate degree requirements prior to taking 3rd year COD coursework.
- Students utilizing financial aid must apply and be accepted into Lewis University prior to taking any classes beyond the AAS degree. It is recommended that students using financial aid should begin applying to Lewis University one semester before completing the AAS degree and ask for the financial aid consortium agreement. Students also need to apply for graduation from the AAS degree program at COD. Not doing so will result in not receiving financial aid.
- Please consult your academic advisor and the current course schedule to determine when courses should be taken.
- The Associate in Applied Science degree must be completed and conferred in order to validate this agreement. Please refer to the student planning worksheet at [www.cod.edu/counseling](http://www.cod.edu/counseling) for COD's AAS degree requirements.
- A student must earn a minimum of 128 credit hours to qualify for graduation with a Bachelor's degree. At least 32 of the 128 credit hours for graduation must be completed through Lewis University. Students follow the degree requirements for the catalog year in which they enter Lewis University.
- Students cannot take College of DuPage courses during their last semester before graduation from Lewis University
- AAS degree name change: effective fall 2019 the Computer and Internetwork Technician (CIT.AAS) degree was changed to Computer and Information Technology (CIT.AAS.CIT). This change only impacts the AAS degree name, no academic changes were made.

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### Term-by-term Plan:

College of DuPage total credits= 96, Lewis University total credits= 32

Courses listed in *italics* are Lewis courses; all other courses are COD courses.

FIRST SEMESTER		HOURS	SECOND SEMESTER		HOURS
Cit 1100	IT Fundamentals (8 week course)	2	Cit 1112	Adv. System Maintenance (8 week course)	3
Cit 1111	Computer & Hardware Maint. (8 week course)	3	Cit 1123	Scaling Networks (8 week course)	3
Cit 1121	Intro to Networks (8 week course)	3	Cit 1124	Connecting Networks (8 week course)	3
Cit 1122	Routing and Switching (8 week course)	3	English 1101	Composition I	3
Math 1431	Pre-Calculus	5	Speech 1100	Fund. of Speech Comm.	3
<b>Total Hours</b>		<b>16</b>	Humanities & Fine Arts		3
			<b>Total Hours</b>		<b>18</b>
THIRD SEMESTER		HOURS	FOURTH SEMESTER		HOURS
Cit 1612	Widows PC Desktop OS	3	Cit 1640	Security Plus	3
Cit 1613	Enterprise PC Support Tech	3	<b>OR</b>		
Cit 1710	Intro to Servers	3	Cit 2251	CCNA Security	
*Cis 1400	Prog Logic & Technique	4	Cit 1645	Internet Telephony	
Physical or Life Science ( <i>must have a lab component</i> )		3 - 5	<b>OR</b>		3
<b>Total Hours</b>		<b>16-18</b>	Cit 2410	CCNA Voice	
			Cit 2710	Capstone Comp Network Int	3
			CIT Elective (2000 - level)		3-4
			Social & Behavior Sciences		3
			<b>Total Hours</b>		<b>15-16</b>

### STOP

DO NOT take fifth semester courses (junior year) until you have completed semester 1-4 courses (freshman-sophomore) first. Once done, take fifth and sixth semester courses after application and acceptance into Lewis University.

FIFTH SEMESTER		HOURS	SIXTH SEMESTER		HOURS
Humanities & Fine Arts		3	CIS Emphasis Sequence Course (see emphasis course section above)		4
CIS Emphasis Sequence Course (see emphasis course section above)		4	Humanities & Fine Arts		3
English 1102	Composition II	3	Social & Behavior Sciences		3
IAI Physical or Life Sciences		3	Philo 1110	Ethics	3
MATH 24000	Applied Calculus	4	MATH 30700	Applied Linear Algebra	3
<b>Total Hours</b>		<b>17</b>	<b>Total Hours</b>		<b>16</b>
SEVENTH SEMESTER		HOURS	EIGHTH SEMESTER		HOURS
Cis 2420	Micro Assembly Language	4	CPSC 35000	Operating Systems	3
Social & Behavior Sciences		3	CPSC 49300	Computer Infrastructure Capstone	3
CPSC 24500	Object Oriented Programming	3	CPSC 42500	Encryption	3
CPSC 34000	Algorithms & Data Structures	3	SOCI 29000	Diversity and Social Justice	3
MATH 31000	Discrete Mathematics	4	THEO 10000	Search For Faith	3
<b>Total Hours</b>		<b>17</b>	<b>Total Hours</b>		<b>15</b>