Associate in Applied Science in Computer Information Technology - Network Admin/Security Track to the Bachelor of Science, Computer Science and Information Systems

Step I: Associate in Applied Science Degree

B.S. Computer Science and Information Systems requirements	Associate in Applied Science Degree courses which fulfill NLU requirements	Semester Hours	Quarter Hours
GENERAL EDUCATION		**10**	**15**
Communications			
Written Communication - min 4 QH	ENG 101 Composition I	3	4.5
Humanities and Fine Arts			
Humanties/Fine Arts - min 4 QH	AAS Humanities General Ed (select an IAI course)	3	4.5
Mathematics/Natural Sciences			
Mathematics - min 4QH	MATH 112 College Algebra	4	6
COMPUTER SCIENCE AND INFORMATION SYSTEMS		**16**	**24**
MIS 103 Management Info Systems Concepts	CS 105 Computer Science Principles	3	4.5
CSS 200 Introduction to Information Systems	CS 100 Introduction to Computers	3	4.5
CSS 205 Operating Systems	ITS 112 Operating Systems	3	4.5
CSS 215 Introduction to Systems Analysis	CIP 260 Systems Design and Development (AAS Technical Elective)	3	4.5
CSS 225 Introduction to Applied Programming	CS 121 Intro to Computer Science (AAS Technical Elective)	4	6
NETWORK AND INFORMATION SECURITY CONCENTRATION		**11**	**16.5**
CSS 302 Information Security	NETW 170 Intro to Information Security	3	4.5
CSS 400 Advanced Studies in Info Security	NETW 125 Introduction to Networks	4	6
CSS 405 Connecting Networks	NETW 145 Switching, Routing & Wireless	4	6
PROGRAM ELECTIVES		**29**	**43.5**
MIS 424 Managing and Developing Websites*	CIP 170 Web Page Development	3	4.5
	ITS 116 Computer Hardware	3	4.5
	ITS 125 IT Professional Skills	1	1.5
	NETW 215 Windows Server	3	4.5
	NETW 167 Powershell	3	4.5
	NETW 265 Enterprise Net.Sec./Automation	4	6
	NETW 255 Advanced Networking/N+ Prep	3	4.5
	NETW 274 Ethical Hacking/Security+Prep	3	4.5
	NETW 280 Cisco CCNA Security	3	4.5
	NETW 290 IT Internship	3	4.5
TOTAL TRANSFER:		**66**	**99**

Note: After transfer, online students are also required to complete MIS 437 (5QH) Data Mining and Warehousing (5) as a part
* This course is a part of Coding and Software Development Concentration

Step II: Additional courses to be taken at Black Hawk College or National Louis University

NLU Requirements	College courses which fulfill NLU requirements	Semester Hours	Quarter Hours
Communications			
ENG 201 Intermediate English Composition	ENG 102 Composition II	3	4.5
ENG 203 Effective Speaking for Undergraduate	SPEC 101 Prin of Speech Communication	3	4.5
Mathematics and Natural Sciences			
Natural Sciences	ASTR 101, 102; BIOL 100, 101, 105, 106, 200, 201, 211, 250, 251; CHEM 101, 110, 111; NSCI 101, 102; PHYS 101, 110, 140, 201; PS 101	3	4.5
MTH 102 Statistical Foundations*	MATH 108 Statistics for Gen Ed	3	4.5
Computer Science and Information Systems Major			
CSS 220 Discrete Structures	MATH 161 Discrete Mathematics	3	4.5
TOTAL TRANSFER:		**15**	**22.5**

*Grade of C or better is required for transfer

Step III: National Louis University - B.S. Computer Science and Information Systems

	SH	QH
General Education Requirement	**20**	**30**
GEN 203 You & NLU: Tools and Strategies of Student Success - This course will be waived for any student who transfers a minimum of 60SH/90QH		
One from the following courses: PHI 107 Ethics, Logic and Critical Inquiry, HIS 103 History Across Globe, ART 101 Basic Art Appreciation (5)		
Two Social and Behavioral Sciences courses (10)		
Two additional General Education courses (10)		
BRV 200 Braven Accelerator or CAR 214 Creating and Communicating the Professional Brand or CAR 202 Creating Professional Identity and CAR 203 You the Professional (5)		
Computer Science and Information Systems Major	**16**	**25**
CSS 210 Introduction to Networking and Information Security		
CSS 300 Data Analysis		
CSS 301 Applied Object-Oriented Programming		
MIS 433 Developing and Managing Databases		
CSS 492 Internship in Computer Science and Information Systems (must be taken at NLU)		
Free Electives	**3**	**4**
TOTAL	**39**	**59**

SUMMARY		SH	QH
Black Hawk College	Associate Degree	66	99
Black Hawk College or National Louis University	Additional Courses from Step II	15	22.5
National Louis University	Courses taken at NLU	39	59
TOTAL		**120**	**180.5**