



### **Transfer Guide**

## Associate of Applied Science Information Technology-Cyber Systems Option to Bachelor of Science in Computer Science, Networking and Data Communication Concentration

The following is presented as an articulation agreement between Prairie State College (PSC) and Olivet Nazarene University (ONU) for the Information Technology- Cyber Systems Option degree program based on the current catalogs of both schools. The student would receive an Associate of Applied Science (AAS) degree from PSC and a Bachelor of Science (BS) degree in Computer Science, Networking and Data Communication Concentration from ONU.

### I. Transferable Credits from the <u>General Education Core Curriculum</u>

### Area 1: Communication (9 hours)

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ENG 101 Composition IENGL 109 College Writing I (3)ENG 102 Composition IIENGL 210 College Writing II (3)COMM 101 Prin. of CommunicationCOMM 105 Fund. of Speech (3)

### Area 2: Social & Behavioral Sciences\*\* (6 hours)

HIST-151 or HIST-152 History Civilization I or II HIST-200 Western Civilization (3)

AND Select one Social & Behavioral Sciences curse- (3)ECON-201 or ECON-202 Economics I or IIECON-110 Principles of EconomicsPOLSC 140 Intro to US Gov't & PoliticsPSCI-223 American GovernmentPSYCH-101 Intro to PsychologyPSYC-101 Intro to PsychologySOCIO-101 Intro to SociologySOCY-120 Intro to Sociology

# Area 3: Humanities, Fine Arts, & Literature \*\*(6 hours) Select 3 hours from TWO different areas:

| Fine Arts                    |                          |
|------------------------------|--------------------------|
| ART 129 Art Appreciation     | ART 100 AND MULT 100 (3) |
| HUMAN 202 Form/Structure Art | ART 100 AND MULT 100 (3) |
| MUSIC 130 Music Appreciation | ART 100 AND MULT 100 (3) |





Literature ENG 240 Intro to Fiction ENG 221 Intro to Poetry

LIT 105 Studies in Literature (3) LIT 105 Studies in Literature (3)

<u>Philosophy</u> PHILO 101 Intro to Philosophy

PHIL 201H Intro to Philosophy (3)

Foreign Language SPAN 202 Spanish

SPAN 212H Intermediate Spanish II (3)

### Area 4: Mathematics/Sciences (11 hours)

MATH 112 Gen Ed Math MATH 103 Math for Lib. Arts (3) required for ONU

## Select one general physical science and one general biological science class. One class must have a lab.

General Physical Science Course (3-5 hours)\*\* General Biological Science Course (3-4 hours)\*\*

### II: Area of Concentration (44)

| IT 101    | IT Orientation (1)- required for AAS degree ONU prefers students complete the AAS degree prior for transfer. |
|-----------|--|
| IT 140    | Intro to Operating Systems (meets COMP 227) (3)  |
| IT 201    | Systems Design & Development (meets BSNS 403) (3)  |
| IT 205    | Ethics in Information Technology (meets COMP 334) (2)  |
| IT 240    | Linux Operating Systems (meets COMP 332 when   |
|           | completed IT 240 & IT 253) (3)   |
| IT 253    | Linux System Administration (meets COMP 332 when   |
|           | completed IT 240 & IT 253) (3)   |
| ITCYB 103 | Intro to Cybersecurity (meets COMP 130) (2)  |
| ITCYB 143 | Scripting & Security (meets COMP 260) (3)  |
| ITNET 160 | Computer Repair (meets COMP 141 AND COMP 142) (4)  |
| ITNET 165 | Intro to Networking (meets COMP 237) (3)   |
| ITNET 175 | Intro to Networking II (meets COMP 238) (3)  |
| ITNET 235 | CCNA LAN Design (meets COMP 238) (3)   |
| ITPRG 158 | Python Programming (meets COMP 150) (3)  |
| ITNET 250 | Intro to LAN Administration (meets COMP 227) (3)   |
| ITNET 260 | Network Security Fundamentals (meets COMP 337) (3)   |
| ITNET 263 | Advanced Windows Server Administration (meets COMP 333) (3)  |





\*\*Refer to the PSC AAS guidelines for a list of course choices in the general education area. The courses listed are recommended but not limited to.

Required A.A.S. Degree Program Total: 60 Credit Hours transferrable hours <u>75 PSC credits transfer to ONU as written above, see next page for more options</u> Students may transfer in a maximum of 82 credit hours from a 2yr/Community College.

### III: Taken at Olivet Nazarene University (min. 44 Credit Hours)

| BLIT 210    | Christian Scriptures (3)                          |
|-------------|---|
| CMIN 310    | Christian Formation (3)                           |
| COMP 120    | Intro to Programming (2)                          |
| COMP 246    | Database Programming (2)                          |
| COMP 247    | Database Design & Administration (2)              |
| COMP 355    | Agile Methodologies (3)                           |
| SPAN 112    | Elem Spanish II (or can take SPAN 102 at PSC) (3) |
| Stewardship | See list of classes below (3)                     |

#### Plus Completion of One Concentration:

| Networking and Data Communications | Concentration   |
|------------------------------------|---|
| COMP 125                           | Cloud Foundations (2)                                 |
| COMP 230                           | ServerOps (3)   |
| COMP 338                           | Wireless Technologies & RF (3)                        |
| COMP 345                           | Cloud Architecture (3)                                |
| COMP 348                           | Packet Analysis & Inspection (3)                      |
| COMP 360                           | Cryptography & Blockchain (3)                         |
| COMP 420                           | Risk Mgmt & Bsns Continuity Planning (3)              |
| Recommended Supporting Classes:    |   |
| COMP 493                           | Software Research & Dev. Project (2)                  |
| COMP 494                           | Internship (1-3)                                      |
| ENGL 311                           | Business Comm/Tech Writing (3)                        |
| FACS 312                           | Professional Image & Dress (1)                        |
| Software Development Concentration |   |
| COMP 125                           | Cloud Formations (2)                                  |
| COMP 250                           | Programming: Data Structures (meets PSC ITPRG 147)(3) |
| COMP 340                           | Human Computer Interface (3)                          |





| COMP 350  | Programming: Object Oriented (meets PSC ITPRG 247) (3)  |
|---|---|
| COMP 360  | Cryptography & Blockchain (3)   |
| COMP 381  | Systems Programming (4)   |
| COMP 445  | Big Data (3)  |
| COMP 475  | Theory of Computation (3)   |
| MATH 137 OR MATH 147  | Applied Calculus OR Calculus I (meets PSC MATH 157 or<br>PSC MATH 171) (3-4)  |
| MATH 311  | Discrete Math (meets PSC MATH 210) (3)  |
| Choose 2 out of 4 Options:  |   |
| COMP 322  | Mobile Application Development (3)  |
| COMP 325  | Cloud Development (3)   |
| COMP 330  | Web Development (meets PSC ITPRG 157) (3)   |
| COMP 347  | Machine Learning/Artificial Intelligence (3)  |
| Recommended Supporting Classes:   |   |
| COMP 493  | Software Research & Dev. Project (2)  |
| COMP 494  | Internship (1-3)  |
| ENGL 311  | Business Comm/Tech Writing (3)  |
| FACS 312  | Professional Image & Dress (1)  |
| MATH 241  | Statistics (meets PSC MATH 153) (4)   |
|   |   |
| Software Entrepreneurship Concentra   | ition   |
| Software Entrepreneurship Concentra<br>COMP 125   | tion<br>Cloud Formations (2)  |
|   |   |
| COMP 125  | Cloud Formations (2)  |
| COMP 125  | Cloud Formations (2)<br>Programming: Data Structures (meets PSC ITPRG 147)  |
| COMP 125<br>COMP 250  | Cloud Formations (2)<br>Programming: Data Structures (meets PSC ITPRG 147)<br>(3)<br>Human Computer Interface (3)<br>Programming: Object Oriented (meets PSC ITPRG 247)   |
| COMP 125<br>COMP 250<br>COMP 340<br>COMP 350  | Cloud Formations (2)<br>Programming: Data Structures (meets PSC ITPRG 147)<br>(3)<br>Human Computer Interface (3)<br>Programming: Object Oriented (meets PSC ITPRG 247)<br>(3)  |
| COMP 125<br>COMP 250<br>COMP 340<br>COMP 350<br>COMP 360  | Cloud Formations (2)<br>Programming: Data Structures (meets PSC ITPRG 147)<br>(3)<br>Human Computer Interface (3)<br>Programming: Object Oriented (meets PSC ITPRG 247)<br>(3)<br>Cryptography & Blockchain (3)   |
| COMP 125<br>COMP 250<br>COMP 340<br>COMP 350<br>COMP 360<br>COMP 381  | Cloud Formations (2)<br>Programming: Data Structures (meets PSC ITPRG 147)<br>(3)<br>Human Computer Interface (3)<br>Programming: Object Oriented (meets PSC ITPRG 247)<br>(3)<br>Cryptography & Blockchain (3)<br>Systems Programming (4)  |
| COMP 125<br>COMP 250<br>COMP 340<br>COMP 350<br>COMP 360<br>COMP 381<br>COMP 493  | Cloud Formations (2)<br>Programming: Data Structures (meets PSC ITPRG 147)<br>(3)<br>Human Computer Interface (3)<br>Programming: Object Oriented (meets PSC ITPRG 247)<br>(3)<br>Cryptography & Blockchain (3)<br>Systems Programming (4)<br>Software Research & Dev. Project (2)  |
| COMP 125<br>COMP 250<br>COMP 340<br>COMP 350<br>COMP 360<br>COMP 381<br>COMP 493<br>ACCT 110  | Cloud Formations (2)<br>Programming: Data Structures (meets PSC ITPRG 147)<br>(3)<br>Human Computer Interface (3)<br>Programming: Object Oriented (meets PSC ITPRG 247)<br>(3)<br>Cryptography & Blockchain (3)<br>Systems Programming (4)<br>Software Research & Dev. Project (2)<br>Financial Accounting (meets PSC BUS 131) (4)  |
| COMP 125<br>COMP 250<br>COMP 340<br>COMP 350<br>COMP 360<br>COMP 381<br>COMP 493<br>ACCT 110<br>BSNS 160  | Cloud Formations (2)<br>Programming: Data Structures (meets PSC ITPRG 147)<br>(3)<br>Human Computer Interface (3)<br>Programming: Object Oriented (meets PSC ITPRG 247)<br>(3)<br>Cryptography & Blockchain (3)<br>Systems Programming (4)<br>Software Research & Dev. Project (2)<br>Financial Accounting (meets PSC BUS 131) (4)<br>Principles of Management (meets PSC BUS 241) (3)  |
| COMP 125<br>COMP 250<br>COMP 340<br>COMP 350<br>COMP 360<br>COMP 381<br>COMP 493<br>ACCT 110<br>BSNS 160<br>BSNS 253  | Cloud Formations (2)<br>Programming: Data Structures (meets PSC ITPRG 147)<br>(3)<br>Human Computer Interface (3)<br>Programming: Object Oriented (meets PSC ITPRG 247)<br>(3)<br>Cryptography & Blockchain (3)<br>Systems Programming (4)<br>Software Research & Dev. Project (2)<br>Financial Accounting (meets PSC BUS 131) (4)<br>Principles of Management (meets PSC BUS 241) (3)<br>Principles of Marketing (meets PSC BUS 251) (3)   |
| COMP 125<br>COMP 250<br>COMP 340<br>COMP 350<br>COMP 360<br>COMP 381<br>COMP 493<br>ACCT 110<br>BSNS 160  | Cloud Formations (2)<br>Programming: Data Structures (meets PSC ITPRG 147)<br>(3)<br>Human Computer Interface (3)<br>Programming: Object Oriented (meets PSC ITPRG 247)<br>(3)<br>Cryptography & Blockchain (3)<br>Systems Programming (4)<br>Software Research & Dev. Project (2)<br>Financial Accounting (meets PSC BUS 131) (4)<br>Principles of Management (meets PSC BUS 241) (3)<br>Principles of Marketing (meets PSC BUS 251) (3)<br>Finite Math OR Applied Calculus OR Calculus I (meets<br>PSC MATH 155 OR PSC MATH 157 OR PSC MATH 171)  |
| COMP 125<br>COMP 250<br>COMP 340<br>COMP 350<br>COMP 360<br>COMP 381<br>COMP 493<br>ACCT 110<br>BSNS 160<br>BSNS 253<br>MATH 117 OR 137 OR 147  | Cloud Formations (2)<br>Programming: Data Structures (meets PSC ITPRG 147)<br>(3)<br>Human Computer Interface (3)<br>Programming: Object Oriented (meets PSC ITPRG 247)<br>(3)<br>Cryptography & Blockchain (3)<br>Systems Programming (4)<br>Software Research & Dev. Project (2)<br>Financial Accounting (meets PSC BUS 131) (4)<br>Principles of Management (meets PSC BUS 241) (3)<br>Principles of Marketing (meets PSC BUS 251) (3)<br>Finite Math OR Applied Calculus OR Calculus I (meets   |
| COMP 125<br>COMP 250<br>COMP 340<br>COMP 350<br>COMP 360<br>COMP 381<br>COMP 493<br>ACCT 110<br>BSNS 160<br>BSNS 253  | Cloud Formations (2)<br>Programming: Data Structures (meets PSC ITPRG 147)<br>(3)<br>Human Computer Interface (3)<br>Programming: Object Oriented (meets PSC ITPRG 247)<br>(3)<br>Cryptography & Blockchain (3)<br>Systems Programming (4)<br>Software Research & Dev. Project (2)<br>Financial Accounting (meets PSC BUS 131) (4)<br>Principles of Management (meets PSC BUS 241) (3)<br>Principles of Marketing (meets PSC BUS 251) (3)<br>Finite Math OR Applied Calculus OR Calculus I (meets<br>PSC MATH 155 OR PSC MATH 157 OR PSC MATH 171)  |
| COMP 125<br>COMP 250<br>COMP 340<br>COMP 350<br>COMP 360<br>COMP 360<br>COMP 381<br>COMP 493<br>ACCT 110<br>BSNS 160<br>BSNS 253<br>MATH 117 OR 137 OR 147<br>Choose 2 out of 6 Options:                    | Cloud Formations (2)<br>Programming: Data Structures (meets PSC ITPRG 147)<br>(3)<br>Human Computer Interface (3)<br>Programming: Object Oriented (meets PSC ITPRG 247)<br>(3)<br>Cryptography & Blockchain (3)<br>Systems Programming (4)<br>Software Research & Dev. Project (2)<br>Financial Accounting (meets PSC BUS 131) (4)<br>Principles of Management (meets PSC BUS 241) (3)<br>Principles of Marketing (meets PSC BUS 251) (3)<br>Finite Math OR Applied Calculus OR Calculus I (meets<br>PSC MATH 155 OR PSC MATH 157 OR PSC MATH 171)<br>(3-4)                                       |
| COMP 125<br>COMP 250<br>COMP 340<br>COMP 350<br>COMP 350<br>COMP 360<br>COMP 381<br>COMP 493<br>ACCT 110<br>BSNS 160<br>BSNS 253<br>MATH 117 OR 137 OR 147<br><b>Choose 2 out of 6 Options:</b><br>COMP 322 | Cloud Formations (2)<br>Programming: Data Structures (meets PSC ITPRG 147)<br>(3)<br>Human Computer Interface (3)<br>Programming: Object Oriented (meets PSC ITPRG 247)<br>(3)<br>Cryptography & Blockchain (3)<br>Systems Programming (4)<br>Software Research & Dev. Project (2)<br>Financial Accounting (meets PSC BUS 131) (4)<br>Principles of Management (meets PSC BUS 241) (3)<br>Principles of Marketing (meets PSC BUS 251) (3)<br>Finite Math OR Applied Calculus OR Calculus I (meets<br>PSC MATH 155 OR PSC MATH 157 OR PSC MATH 171)<br>(3-4)<br>Mobile Application Development (3) |





COMP 347Machine Learning/Artificial Intelligence (3)COMP 445Big Data (3)COMP 475Theory of Computation (3)Recommended Supporting Classes:Internship (1-3)COMP 494Internship (1-3)ENGL 311Business Comm/Tech Writing (3)FACS 312Professional Image & Dress (1)MATH 241Statistics (meets PSC MATH 153) (4)

### **Olivet Nazarene University Graduation Requirements**

- Minimum credit hours required for BS in Computer Science: 120 credit hours
- A minimum grade point average of 2.0 ("C") required.
- A minimum of a "C" grade is required for major and supporting coursework.
- A minimum *institutional* grade point average of 2.0 required.
- A minimum of 30 hours of credit in upper-division courses (numbered 300 or above) for bachelor's degrees
- Completion of a major program of study as specified by the College, School, or Department to which the major belongs including:
  - All general Education courses
  - All major and supporting courses
- Lower-level courses may cover the same material as the ONU equivalent, but is taught at a lower level. It cannot be used to satisfy the Olivet requirement of 30 upper division hours (300-400 level courses).

For additional Information: Olivet Nazarene University Office of Admissions 800-648-1463 https://www.olivet.edu/transferequivalency Tiffany Holohan Dir. of Community College & Academic Partnerships tmholohan@olivet.edu 815-928-5515

Prairie State College

### Stewardship (2-3 Hours)

BSNS 302 Personal Finance CDEV 360 Child Family Relations COMM 203 Interpersonal Comm. PHED 126 Nutrition, Health, & Fit. FACS 252 Consumer Economics PHED 190 Wellness SOCY 305 Human Sexuality SOCY 340 Sociology of Marriage SOCY 351 Sociology of the Family SOWK 365 Crisis Intervention

PSC COMM 108 Inter. Comm. PSC PES 230 Nutrition for Exercise

PSC HLTH 101 Health & Wellness PSC PSYCH 217 Human Sexuality

PSC SOCIO 210 Marriage & Family





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