Appendix B

AIU and WP 3+1 Bachelor of Science in Information Technology

| WP | Credits | AIU/Equivalent |
|--|---------------|--|
| Se | mester 1 (Al | (U) |
| MATH1610 Calculus II (sequence of MAT111+MAT112) | | MATILI Malamatan I |
| | 3 | MAT111 Mathematics I |
| WP General Education Required Course | 3 | PHY211 Physics II |
| CS 2010 Computer and Information | | CSE013 Introduction to Information |
| Technology | 3 | Systems and Technology |
| | | CSE012 Scientific Application of Computers |
| CS 2300 Computer Science I | 4 | CSE014 Structured Programming |
| WP General Education Required Course | 3 | UE1 Elective University (1) ADL123 |
| WP General Education Required Course | 3 | UE3 Elective University (3) HIS111 |
| Se | emester 2 (AI | U) |
| MATH 1610 Calculus II | 4 | MAT112 Mathematics II |
| MATH 2300 Statistics | 4 | MAT131 Probability & Statistics I |
| CS 2421 Object-Oriented Program in JAVA | 4 | CSE015 Object Oriented Programming |
| CS 2650 Discrete Structures for CIT | 3 | CSE315 Discrete Mathematics |
| | 2 | UC3 University Requirement (3) LIB116 |
| WP General Education Required Course | 3 | UE2 Elective University (2) DVA014 |
| Sur | nmer term (A | AIU) |
| WP General Education Required Course | 3 | UC5 University Requirement (5) GEO217 |
| | 2 | UC7 University Requirement (7) PSC101 |
| So | emester 3 (AI | U) |
| MATH 2200 Linear Algebra | 3 | MAT212 Linear Algebra |
| MATH 2300 Statistics | 4 | MAT 231Probability & Statistics II |
| CS 3420 Data Structure | 4 | CSE111 Data Structures |
| CS 2350 Fundamentals of Computer Hardware | 3 | CSE 131 Logic Design |

| CS 4100 Artificial Intelligence | 3 | AIE111 Artificial Intelligence |
|---|-------------|---|
| | 0 | UC4University Requirement (4) LAN114 |
| Sem | nester 4 (A | AIU) |
| | | MAT312 Differential Equations |
| CS 3410 Digital Logic and Computer Organization | 3 | CSE132 Computer Architecture & Organization |
| CS 3570 Fundamentals of Web-Based Information Technology | 3 | CSE211 Web Programming |
| CS 3550 Data Management Concepts and Applications | 3 | CSE221 Database Systems |
| | | CSE191 Field Training 1 in Computer Science |
| CS 3500 Software Engineering | 3 | CSE251 Software Engineering |
| Sem | nester 5 (A | AIU) |
| | | CSE454 Advanced Software Engineering |
| CS 2352 Applied Operating Systems | 3 | CSE233 Operating Systems |
| CS 2421 Object-Oriented Program in JAVA | 4 | CSE 352 Systems Analysis & Design |
| CS 3351 Computer Networks I | 4 | CSE 261 Computer Networks |
| | | E1 - CSE313 Mobile Programming |
| | | AIE121 Machine Learning |
| Sumn | ner term | (AIU) |
| | | E5 Elective Course (5) |
| Sem | nester 6 (A | AIU) |
| CS 3720 Design and Analysis Algorithms | 3 | CSE112 Design & Analysis of Algorithms |
| CS 3800 Cybersecurity Essentials | 3 | CSE241 Security of Information Systems |
| | | E2 Elective Course (2) |
| | | CSE323 Advanced Database Systems |
| | | E3 Elective Course (3) |
| | | UC6 University requirements(6) MGT301 |
| Sumn | ner term | (AIU) |

| | | CSE 292 Field Training 2 in Computer |
|---|-------------|--|
| | | Science |
| Sen | nester 7 (V | VP) |
| CS 4700 Cloud Computing | 3 | CSE363Cloud Computing |
| CS 4080 Data Mining and Machine Learning | 3 | AIE 323 Data Mining |
| CS 3401 System Administration | 3 | |
| CS 3660 Fundamentals of Information | | |
| Assurance and Security | 3 | |
| CS 4500 CIT Seminar | 3 | |
| CS 4060 Applied Cryptography | 3 | |
| | | CSE 493 Graduation Project 1 |
| Sen | nester 8 (V | WP) |
| CS 4200 Compiler Construction | | CSE411 Theory of Computation & |
| CS 1200 Compiler Construction | 3 | Compilers |
| CS 3600 Parallel and Distributed Computing | 3 | CSE474 Distributed Information Systems |
| CS 4070 Data Science Analytics | | E4 - CSE426 Selected Topics in Data |
| | 3 | Science |
| CS 4066 Penetration Testing & Ethical | | |
| Hacking | 3 | |
| CS 4250 Defensive Security | 3 | |
| CS 3352 Computer Networks II | 4 | |
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Notes:

- 1. William Paterson University will accept all degree credits under this program-to-program articulation agreement, including up to half of the William Paterson University major required credits. All students must complete thirty credits at WP to satisfy the university's credit residency requirement.
- 2. Students who complete the first three years at AIU have fulfilled the World Language Requirement.
- 3. WP Online students should always check with their advisor and/or refer to the semester course schedule when choosing electives, as elective course offerings may vary each semester.