

**COURSE SEQUENCE GUIDE FOR FULL-TIME ENROLLMENT:** Students Transitioning from an Associate of Arts Degree  
**Information Systems Technology – Software Engineering**  
 Bachelor of Science | Code: S9501 | 120 credits  
**Effective Term: Fall 2025 (2257)**

**Semester 1**

Course ID	Course Title	Credits	Pre/Co-requisites
CIS 3360	Principles of Information Security	4	Prerequisite: CTS 1134 or CTS 1650
COP 2800	Java Programming	4	Prerequisites: COP 1047C, COP 1334, or COP 2270
COT 3100	Discrete Structures	4	Prerequisites: MAC 1105 and COP 1334
<b>Semester Credits</b>		<b>12</b>	

**Semester 2**

Course ID	Course Title	Credits	Pre/Co-requisites
CGS 3763	Operating Systems Principles	4	Prerequisite: COP 1334
COP 3530	Data Structures	4	Prerequisite: COP 2800
Elective	Group A - Choose 8 credits from any course with the following prefixes: CAI*, CAP *, CEN *, CET *, CGS *, CIS *, CNT *, COP *, CTS *  Group B - Choose 12 credits from any <b>2000, 3000, or 4000 level</b> courses with the following prefixes: CAI*, CAP*, CEN*, CET*, CGS*, CIS*, CNT*, COP*, CTS*, MAC 2333	4	<b>Note:</b> Program electives must total 20 credits (8 credits from group A, and 12 from group B). Students needing elective credits are recommended to choose courses of study that will supplement their learning, including CAI (Artificial Intelligence) or COP (Programming; Mobile App Development). MAC 2233 is required for students interested in applying to the <a href="#">Master in Science in IT and Management at FAU</a> . Please speak to an academic advisor for assistance with course selection and requisite information.
<b>Semester Credits</b>		<b>12</b>	

**Semester 3**

Course ID	Course Title	Credits	Pre/Co-requisites
CET 3383C	Software Engineering 1	4	Prerequisite: COP 2800 or CET 2369C
COT 4400	Design and Analysis of Algorithms	4	Prerequisite: COP 2800; Pre/Corequisite: COP 3530
<b>Summer Semester Credits</b>		<b>8</b>	

**Semester 4**

Course ID	Course Title	Credits	Pre/Co-requisites
CET 3126C	Computer Architecture	4	
CEN 4065C	Software Architecture and Design	4	Prerequisite: COP 3530. Students must enroll in this course one semester before taking CEN 4090C
ETI 4480C	Applied Robotics	4	Prerequisite: CET 2123C or CET 3383C
<b>Semester Credits</b>		<b>12</b>	

**Semester 5**

Course ID	Course Title	Credits	Pre/Co-requisites
CEN 4090C	Software Engineering Capstone	4	Departmental Approval Required
Elective	Group A - Choose 8 credits from any course with the following prefixes: CAI*, CAP *, CEN *, CET *, CGS *, CIS *, CNT *, COP *, CTS *  Group B - Choose 12 credits from any <b>2000, 3000, or 4000 level</b> courses with the following prefixes: CAI*, CAP*, CEN*, CET*, CGS*, CIS*, CNT*, COP*, CTS*, MAC 2333	4	<b>Note:</b> Program electives must total 20 credits (8 credits from group A, and 12 from group B). Students needing elective credits are recommended to choose courses of study that will supplement their learning, including CAI (Artificial Intelligence) or COP (Programming; Mobile App Development). MAC 2233 is required for students interested in applying to the <a href="#">Master in Science in IT and Management at FAU</a> . Please speak to an academic advisor for assistance with course selection and requisite information.
Elective	Group A - Choose 8 credits from any course with the following prefixes: CAI*, CAP *, CEN *, CET *, CGS *, CIS *, CNT *, COP *, CTS *  Group B - Choose 12 credits from any <b>2000, 3000, or 4000 level</b> courses with the following prefixes: CAI*, CAP*, CEN*, CET*, CGS*, CIS*, CNT*, COP*, CTS*, MAC 2333	4	<b>Note:</b> Program electives must total 20 credits (8 credits from group A, and 12 from group B). Students needing elective credits are recommended to choose courses of study that will supplement their learning, including CAI (Artificial Intelligence) or COP (Programming; Mobile App Development). MAC 2233 is required for students interested in applying to the <a href="#">Master in Science in IT and Management at FAU</a> . Please speak to an

			academic advisor for assistance with course selection and requisite information.
	<b>Semester Credits</b>	<b>12</b>	

**Semester 6**

Course ID	Course Title	Credits	Pre/Co-requisites
Elective	<p>Group A - Choose 8 credits from any course with the following prefixes: CAI*, CAP *, CEN *, CET *, CGS *, CIS *, CNT *, COP *, CTS *</p> <p>Group B - Choose 12 credits from any <b>2000, 3000, or 4000 level</b> courses with the following prefixes: CAI*, CAP*, CEN*, CET*, CGS*, CIS*, CNT*, COP*, CTS*, MAC 2333</p>	4	<p><b>Note:</b> Program electives must total 20 credits (8 credits from group A, and 12 from group B). Students needing elective credits are recommended to choose courses of study that will supplement their learning, including CAI (Artificial Intelligence) or COP (Programming; Mobile App Development). MAC 2233 is required for students interested in applying to the <a href="#">Master in Science in IT and Management at FAU</a>. Please speak to an academic advisor for assistance with course selection and requisite information.</p>
	<b>Semester Credits</b>	<b>4</b>	
	<b>Program Total</b>	<b>60</b>	

**Academic Pathway at MDC:** This course sequence guide is for Bachelor of Science (BS) in Information Systems Technology, Software Engineering students transitioning **from the Associate in Arts (AA), and whose start term for the AA was Fall 2021 or later**. Students outside of this threshold should consult with an academic advisor for guidance. To learn more about program courses, see the [College Catalog](#). Certain courses will prepare you for in-demand industry certifications and costs of exams may be eligible for reimbursement. You may also accelerate your studies via credit for prior learning or credit for attained industry certifications. [Learn more.](#)

**Information Systems Technology – Software Engineering**

Bachelor of Science | Code: S9501 | 120 credits

**Effective Term: Fall 2025 (2257)**
**Semester 1**

Course ID	Course Title	Credits	Pre/Co-requisites
COP 2800	Java Programming	4	Prerequisites: COP 1334, COP 2270, or COP 1047C
COT 3100	Discrete Structures	4	Prerequisites: MAC 1105 and COP 1334
<b>Semester Credits</b>		<b>8</b>	

**Semester 2**

Course ID	Course Title	Credits	Pre/Co-requisites
CIS 3360	Principles of Information Security	4	Prerequisite: CTS 1134 or CTS 1650
COP 3530	Data Structures	4	Prerequisite: COP 2800
<b>Semester Credits</b>		<b>8</b>	

**Semester 3**

Course ID	Course Title	Credits	Pre/Co-requisites
Elective	Group A - Choose 8 credits from any course with the following prefixes: CAI*, CAP *, CEN *, CET *, CGS *, CIS *, CNT *, COP *, CTS *  Group B - Choose 12 credits from any <b>2000, 3000, or 4000 level</b> courses with the following prefixes: CAI*, CAP*, CEN*, CET*, CGS*, CIS*, CNT*, COP*, CTS*, MAC 2333	4	<b>Note:</b> Program electives must total 20 credits (8 credits from group A, and 12 from group B). Students needing elective credits are recommended to choose courses of study that will supplement their learning, including CAI (Artificial Intelligence) or COP (Programming; Mobile App Development). MAC 2233 is required for students interested in applying to the <a href="#">Master in Science in IT and Management at FAU</a> . Please speak to an academic advisor for assistance with course selection and requisite information.
Elective	Group A - Choose 8 credits from any course with the following prefixes: CAI*, CAP *, CEN *, CET *, CGS *, CIS *, CNT *, COP *, CTS *  Group B - Choose 12 credits from any <b>2000, 3000, or 4000 level</b> courses with the following prefixes: CAI*, CAP*, CEN*, CET*, CGS*, CIS*, CNT*, COP*, CTS*, MAC 2333	4	
<b>Summer Semester Credits</b>		<b>8</b>	

**Semester 4**

Course ID	Course Title	Credits	Pre/Co-requisites
CGS 3763	Operating Systems Principles	4	Prerequisite: COP 1334
CET 3383C	Software Engineering 1	4	Prerequisite: COP 2800 or CET 2369C
<b>Semester Credits</b>		<b>8</b>	

**Semester 5**

Course ID	Course Title	Credits	Pre/Co-requisites
CET 3126C	Computer Architecture	4	
COT 4400	Design and Analysis of Algorithms	4	Prerequisite: COP 2800; Pre/Corequisite: COP 3530
<b>Semester Credits</b>		<b>8</b>	

**Semester 6**

Course ID	Course Title	Credits	Pre/Co-requisites
Elective	Group A - Choose 8 credits from any course with the following prefixes: CAI*, CAP *, CEN *, CET *, CGS *, CIS *, CNT *, COP *, CTS *  Group B - Choose 12 credits from any <b>2000, 3000, or 4000 level</b> courses with the following prefixes: CAI*, CAP*, CEN*, CET*, CGS*, CIS*, CNT*, COP*, CTS*, MAC 2333	4	<b>Note:</b> Program electives must total 20 credits (8 credits from group A, and 12 from group B). Students needing elective credits are recommended to choose courses of study that will supplement their learning, including CAI (Artificial Intelligence) or COP (Programming; Mobile App Development). MAC 2233 is required for students interested in applying to the <a href="#">Master in Science in IT and Management at FAU</a> . Please speak to an academic advisor for assistance with course selection and

			requisite information.
	<b>Summer Semester Credits</b>	<b>4</b>	

**Semester 7**

Course ID	Course Title	Credits	Pre/Co-requisites
CEN 4065C	Software Architecture and Design	4	Prerequisite: COP 3530. Students must enroll in this course one semester before taking CEN 4090C
ETI 4480C	Applied Robotics	4	Prerequisite: CET 2123C or CET 3383C
	<b>Semester Credits</b>	<b>8</b>	

**Semester 8**

Course ID	Course Title	Credits	Pre/Co-requisites
CEN 4090C	Software Engineering Capstone	4	Departmental Approval Required
Elective	<p>Group A - Choose 8 credits from any course with the following prefixes: CAI*, CAP*, CEN*, CET*, CGS*, CIS*, CNT*, COP*, CTS*</p> <p>Group B - Choose 12 credits from any <b>2000, 3000, or 4000 level</b> courses with the following prefixes: CAI*, CAP*, CEN*, CET*, CGS*, CIS*, CNT*, COP*, CTS*, MAC 2333</p>	4	<p><b>Note:</b> Program electives must total 20 credits (8 credits from group A, and 12 from group B). Students needing elective credits are recommended to choose courses of study that will supplement their learning, including CAI (Artificial Intelligence) or COP (Programming; Mobile App Development). MAC 2233 is required for students interested in applying to the <a href="#">Master in Science in IT and Management at FAU</a>. Please speak to an academic advisor for assistance with course selection and requisite information.</p>
	<b>Semester Credits</b>	<b>8</b>	
	<b>Program Total</b>	<b>60</b>	

**Semester 1**

Course ID	Course Title	Credits	Pre/Co-requisites
CIS 3360	Principles of Information Security	4	Prerequisite: CTS 1134 or CTS 1650
COP 2800	Java Programming	4	Prerequisites: COP 1047C, COP 1334, or COP 2270
COT 3100	Discrete Structures	4	Prerequisites: MAC 1105 and COP 1334
<b>Semester Credits</b>		<b>12</b>	

**Semester 2**

Course ID	Course Title	Credits	Pre/Co-requisites
CGS 3763	Operating Systems Principles	4	Prerequisite: COP 1334
COP 3530	Data Structures	4	Prerequisite: COP 2800
ENC 1102	English Composition 2	3	Prerequisite: ENC 1101
Humanities	<b>MDC Core:</b> ARC 2701, ARC 2702, ARH 1000, ARH 2050, ARH 2051, ARH 2740, DAN 2100, DAN 2130, HUM 1020, IND 1100, IND 1130, LIT 2000, LIT 2120, MUH 2111, MUH 2112, MUL 1010, MUL 2380, PHI 2010, PHI 2600, THE 2000	3	<b>Note:</b> Check with advisor for requisites. State Board of Education Rule 6A-10.030, the Gordon Rule, requires that students successfully complete 12 credits in designated courses (see Program Sheet) in which the student is required to demonstrate college-level writing skills through multiple assignments. Students who have not met the 12 credits, must select a Gordon Rule course from Humanities or Social Sciences.
<b>Semester Credits</b>		<b>14</b>	

**Semester 3**

Course ID	Course Title	Credits	Pre/Co-requisites
CET 3383C	Software Engineering I	4	Prerequisite: COP 2800 or CET 2369C
COT 4400	Design and Analysis of Algorithms	4	Prerequisite: COP 2800; Pre/Corequisite: COP 3530
Foreign Language Competence	<b>Note:</b> Foreign language is a graduation requirement for the baccalaureate met through 8 credit hours at the elementary 2 level in one foreign language or equivalent. Certain foreign language courses count towards program electives. Students may satisfy equivalence through standardized examinations or successful completion of two credits (two years) in one foreign language at the secondary (high school) level. For additional information, including exemptions for students whose native language is not English, see the <a href="#">Testing and Assessment Department</a> .		
<b>Summer Semester Credits</b>		<b>8</b>	

**Semester 4**

Course ID	Course Title	Credits	Pre/Co-requisites
CET 3126C	Computer Architecture	4	
CEN 4065C	Software Architecture and Design	4	Prerequisite: COP 3530. Students must enroll in this course one semester before taking CEN 4090C
ETI 4480C	Applied Robotics	4	Prerequisite: CET 2123C or CET 3383C
<b>Semester Credits</b>		<b>12</b>	

**Semester 5**

Course ID	Course Title	Credits	Pre/Co-requisites
CEN 4090C	Software Engineering Capstone	4	Departmental Approval Required
Elective	Group A - Choose 8 credits from any course with the following prefixes: CAI*, CAP*, CEN*, CET*, CGS*, CIS*, CNT*, COP*, CTS*  Group B - Choose 12 credits from any <b>2000, 3000, or 4000 level</b> courses with the following prefixes: CAI*, CAP*, CEN*, CET*, CGS*, CIS*, CNT*, COP*, CTS*, MAC 2333	4	<b>Note:</b> Program electives must total 20 credits (8 credits from group A, and 12 from group B). Students needing elective credits are recommended to choose courses of study that will supplement their learning, including CAI (Artificial Intelligence) or COP (Programming; Mobile App Development). MAC 2233 is required for students interested in applying to the <a href="#">Master in Science in IT and Management at FAU</a> . Please speak to an academic advisor for assistance with course selection and requisite information.

Elective	<p>Group A - Choose 8 credits from any course with the following prefixes: CAI*, CAP *, CEN *, CET *, CGS *, CIS *, CNT *, COP *, CTS *</p> <p>Group B - Choose 12 credits from any <b>2000, 3000, or 4000 level</b> courses with the following prefixes: CAI*, CAP*, CEN*, CET*, CGS*, CIS*, CNT*, COP*, CTS*, MAC 2333</p>	3	<b>Note:</b> Program electives must total 20 credits (8 credits from group A, and 12 from group B). Students needing elective credits are recommended to choose courses of study that will supplement their learning, including CAI (Artificial Intelligence) or COP (Programming; Mobile App Development). MAC 2233 is required for students interested in applying to the <a href="#">Master in Science in IT and Management at FAU</a> . Please speak to an academic advisor for assistance with course selection and requisite information.
Natural Sciences	<b>MDC Core:</b> AST 1002, BOT 1010, BSC 1005, BSC 1030, BSC 1050, BSC 1084, BSC 2010, BSC 2020, BSC 2085, BSC 2250, ESC 1000, EVR 1001, HUN 1201, OCB 1010, PCB 2033, PSC 1121, PSC 1515, ZOO 1010, CHM*, GLY*, MET*, OCE*, PHY*	3	<b>Note:</b> Check with advisor for requisites
	<b>Semester Credits</b>	<b>14</b>	
	<b>Program Total</b>	<b>60</b>	

**Academic Pathway at MDC:** This course sequence guide is for Bachelor in Science (BS) in Information Systems Technology, Software Engineering students transitioning **from an Associate in Science (AS), and whose start term for the AS was Fall 2022 or later, and met program prerequisites.** Students outside of this threshold should consult with an academic advisor for guidance as different requirements may apply, including but not limited to Civic Literacy. To learn more about program courses, see the [College Catalog](#). Certain courses will prepare you for in-demand industry certifications and costs of exams may be eligible for reimbursement. You may also accelerate your studies via credit for prior learning or credit for attained industry certifications. [Learn more.](#)

**Semester 1**

Course ID	Course Title	Credits	Pre/Co-requisites
COP 2800	Java Programming	4	Prerequisites: COP 1334, COP 2270, or COP 1047C
COT 3100	Discrete Structures	4	Prerequisites: MAC 1105 and COP 1334
<b>Semester Credits</b>		<b>8</b>	

**Semester 2**

Course ID	Course Title	Credits	Pre/Co-requisites
CIS 3360	Principles of Information Security	4	Prerequisite: CTS 1134 or CTS 1650
COP 3530	Data Structures	4	Prerequisite: COP 2800
<b>Semester Credits</b>		<b>8</b>	

**Semester 3**

Course ID	Course Title	Credits	Pre/Co-requisites
ENC 1102	English Composition 2	3	Prerequisite: ENC 1101
Humanities	<b>MDC Core:</b> ARC 2701, ARC 2702, ARH 1000, ARH 2050, ARH 2051, ARH 2740, DAN 2100, DAN 2130, HUM 1020, IND 1100, IND 1130, LIT 2000, LIT 2120, MUH 2111, MUH 2112, MUL 1010, MUL 2380, PHI 2010, PHI 2600, THE 2000	3	<b>Note:</b> Check with advisor for requisites. State Board of Education Rule 6A-10.030, the Gordon Rule, requires that students successfully complete 12 credits in designated courses (see Program Sheet) in which the student is required to demonstrate college-level writing skills through multiple assignments. Students who have not met the 12 credits, must select a Gordon Rule course from Humanities or Social Sciences.
Foreign Language Competence	<b>Note:</b> Foreign language is a graduation requirement for the baccalaureate met through 8 credit hours at the elementary 2 level in one foreign language or equivalent. Certain foreign language courses count towards program electives. Students may satisfy equivalence through standardized examinations or successful completion of two credits (two years) in one foreign language at the secondary (high school) level. For additional information, including exemptions for students whose native language is not English, see the <a href="#">Testing and Assessment Department</a> .		
<b>Semester Credits</b>		<b>6</b>	

**Semester 4**

Course ID	Course Title	Credits	Pre/Co-requisites
CGS 3763	Operating Systems Principles	4	Prerequisite: COP 1334
CET 3383C	Software Engineering 1	4	Prerequisite: COP 2800 or CET 2369C
<b>Semester Credits</b>		<b>8</b>	

**Semester 5**

Course ID	Course Title	Credits	Pre/Co-requisites
CET 3126C	Computer Architecture	4	
COT 4400	Design and Analysis of Algorithms	4	Prerequisite: COP 2800; Pre/Corequisite: COP 3530
<b>Summer Semester Credits</b>		<b>8</b>	

**Semester 6**

Course ID	Course Title	Credits	Pre/Co-requisites
Elective	Group A - Choose 8 credits from any course with the following prefixes: CAI*, CAP*, CEN*, CET*, CGS*, CIS*, CNT*, COP*, CTS*  Group B - Choose 12 credits from any <b>2000, 3000, or 4000 level</b> courses with the following prefixes: CAI*, CAP*, CEN*, CET*, CGS*, CIS*, CNT*, COP*, CTS*, MAC 2333	3	<b>Note:</b> Program electives must total 20 credits (8 credits from group A, and 12 from group B). Students needing elective credits are recommended to choose courses of study that will supplement their learning, including CAI (Artificial Intelligence) or COP (Programming; Mobile App Development). MAC 2233 is required for students interested in applying to the <a href="#">Master in Science in IT and Management at FAU</a> . Please speak to an academic advisor for assistance with course selection and requisite information.
Natural Sciences	<b>MDC Core:</b> AST 1002, BOT 1010, BSC 1005, BSC 1030, BSC 1050, BSC 1084, BSC 2010, BSC 2020, BSC 2085, BSC 2250, ESC 1000, EVR 1001, HUN 1201, OCB 1010, PCB 2033, PSC 1121, PSC 1515, ZOO 1010, CHM*, GLY*, MET*, OCE*, PHY*	3	<b>Note:</b> Check with advisor for requisites.

	<b>Semester Credits</b>	<b>6</b>	
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**Semester 7**

Course ID	Course Title	Credits	Pre/Co-requisites
CEN 4065C	Software Architecture and Design	4	Prerequisite: COP 3530. Students must enroll in this course one semester before taking CEN 4090C
ETI 4480C	Applied Robotics	4	Prerequisite: CET 2123C or CET 3383C
	<b>Semester Credits</b>	<b>8</b>	

**Semester 8**

Course ID	Course Title	Credits	Pre/Co-requisites
CEN 4090C	Software Engineering Capstone	4	Departmental Approval Required
Elective	<p>Group A - Choose 8 credits from any course with the following prefixes: CAI*, CAP*, CEN*, CET*, CGS*, CIS*, CNT*, COP*, CTS*</p> <p>Group B - Choose 12 credits from any <b>2000, 3000, or 4000 level</b> courses with the following prefixes: CAI*, CAP*, CEN*, CET*, CGS*, CIS*, CNT*, COP*, CTS*, MAC 2333</p>	4	<p><b>Note:</b> Program electives must total 20 credits (8 credits from group A, and 12 from group B). Students needing elective credits are recommended to choose courses of study that will supplement their learning, including CAI (Artificial Intelligence) or COP (Programming; Mobile App Development). MAC 2233 is required for students interested in applying to the <a href="#">Master in Science in IT and Management at FAU</a>. Please speak to an academic advisor for assistance with course selection and requisite information.</p>
	<b>Summer Semester Credits</b>	<b>8</b>	
	<b>Program Total</b>	<b>60</b>	