

## Data Science Technology (2157) (A.S.)

### ASSOCIATE IN SCIENCE RECOMMENDED ROADMAP

This academic roadmap is designed to help you select courses each term for your **Associate in Science Degree in Data Science Technology (2157) (A.S.)**. The mission of the Data Science Technology Associate in Science program is to prepare students to enter or advance in the field of data science by combining traditional college education with hands-on training in areas of data acquisition, processing, and transformation techniques applied to modeling, analysis, and visualization.

Full-time students will refer to the term-by-term recommendations, and part-time students will refer to the course-by-course recommendations. "Mile Markers and Notes" on the Roadmap refer to important guidelines for program completion.

This roadmap is intended to provide general guidance about recommended courses and mile markers. For specific guidance about your individual academic degree plan, please see a program advisor. Please also refer to the College Catalog for additional information.

#### Embedded Certificate(s)

Two technical certificates are available within this degree program: Data Science Technician I (6985) (T.C.) and Data Science Technician II (6987) (T.C.). Students may pursue the A.S. degree and earn technical certificates while completing the requirements for the degree or pursue one or more certificates to develop or upgrade their skills in a particular field. Contact an advisor to determine the career education path that is best for you.

**Career Options:** FSCJ is the regional resource for employers in many types of computer technology. Our partnerships with Cisco Systems, Dell, Microsoft, VMware, and Citrix provide career connections. Graduates are regularly employed by CSX, JEA, Florida Blue, the City of Jacksonville, Medtronic, Mayo Clinic, and other regional employers including the government and military. According to the Bureau of Labor Statistics, employment of Information Security Analysts is expected to grow 28 percent from 2016 to 2026, much faster than average for all occupations. Demand for these workers is high and will continue to grow because innovative solutions are needed to prevent the hacking of critical data and network damage.

Term Offered: F = Fall Sp = Spring Sm = Summer

Available Modalities: HB = Hybrid OC = On-Campus OL = Online

Full-Time Students: Term-by-Term	Part-Time Students: Course-by-Course	Course: Course Title	Credit Hours	T.C. in Data Science Technician I	T.C. in Data Science Technician II	Term Offered	Available Modalities	Mile Markers and Notes
Term 1								Complete an academic degree plan with your advisor.
	1.	ENC 1101: English Composition I	3					Follow up with an advisor about any accelerated credits that you may have earned (e.g., dual enrollment, AP, CLEP, Industry Certifications, etc.).
	2.	Choose 1 General Education Mathematics	3		X			ENC 1101C can be taken in place of ENC 1101. Please speak with your advisor for more information.
	3.	CGS 1060C: Introduction to Information Technology	3	X	X	F, Sp, Sm	HB, OC, OL	See the options for the General Education Requirements in the current College Catalog.
	4.	CNT 1015: Operating Systems Foundations	3		X	F, Sp, Sm	HB, OC, OL	

Term 2	5.	Choose 1 General Education Humanities	3					See the options for the General Education Requirements in the current College Catalog.
	6.	STA 2023: Elementary Statistics	3		X			
	7.	CNT 2001C: Computer Networks and Telecommunications	3			F, Sp, Sm	HB, OL	
	8.	COP 1000C: Introduction to Computer Programming	3	X	X	F, Sp, Sm	HB, OC, OL	
Term 3	9.	CGS 2512: Spreadsheet Concepts and Practices	3	X	X	F, Sp, Sm	HB, OC, OL	
	10.	COP 2800C: Java 1	3	X	X	F, Sp		
	11.	CTS 1120C: Fundamentals of Information Security	3			F, Sp, Sm	HB, OC, OL	
	12.	CTS 2437C: SQL Server I - Fundamentals	3	X	X	F, Sp, Sm	HB, OC, OL	
Term 4	13.	Choose 1 General Education Social Sciences	3					See the options for the General Education Requirements in the current College Catalog.  T.C. in Data Science Technician I earned
	14.	CAP 2787C: Data Warehousing	3	X		Sm	HB, OC	
	15.	COP 2034C: Programming in Python	3	X	X	F, Sp, Sm	HB, OC, OL	
	16.	COP 2822C: Web Technologies	4		X	F, Sp, Sm	HB, OC, OL	
Term 5	17.	CAP 2741C: Data Visualization	2		X	F	OL	T.C. in Data Science Technician II earned  Apply for graduation by the required date.  <i>Congratulations, Graduate! Celebrate your success at Commencement!</i>
	18.	CIS 2349C: Introduction to Big Data Using Hadoop	3		X	F	OC, OL	
	19.	COP 2073C: Introduction to Statistical Programming with R	3		X	F	HB, OC, OL	
	20.	CTS 2456C: Introduction to SAS Programming	3		X	F	HB, OC, OL	
<b>Total Program Credit Hours =</b>			<b>60</b>	<b>21</b>	<b>42</b>			

### Important for You to Know:

- This academic roadmap does not include developmental education courses in reading, writing, and/or mathematics that you may be required to take. In addition, it does not include MAT 1033: Intermediate Algebra, which, for many students, is a prerequisite course for MAC 1105. Please consult with an advisor for individual assistance.