

Computer Science - Artificial Intelligence (AI) and Data Science
(CIP 11.0701)
Associate of Applied Science

The Associate of Applied Science (AAS) in Computer Science - Artificial Intelligence (AI) and Data Science is a recommended course of study for high school graduates or career changers who want to obtain entry-level positions or enhance their job prospects and knowledge in the rapidly growing fields of AI, data science, and data analysis. The degree prepares students for hands-on technical roles in these fields and provides foundational knowledge in Machine Learning (ML), Natural Language Processing (NLP), cloud computing, programming, data analysis, and the creation of intelligent systems. The degree offers technical skills for roles like AI developer, data scientist, data analyst, and it can serve as direct employment in various industries such as marketing, retail, finance, tech, medicine, and manufacturing.

Courses	
College Readiness Courses (if needed) and TSI Math requirements met.	
Semester I	Hours
COSC 1436 Programming Fundamentals I	4
ITAI 1370 Artificial Intelligence (AI) History, Theory, and Platforms	3
ITSE 1302 Computer Programming (Python)	3
ITSY 1300 Fundamentals of Information Security	3
ITNW 1309 Fundamentals of Cloud Computing	3
Semester 1 Hours	16
Semester II	
COSC 1437 Programming Fundamentals II	4
COSC 2425 Computer Organization	4
DATN 1377 Cloud Computing for Data Analytics	3
DSAI 1371 Introduction to Data Science and Artificial Intelligence (AI)	3
ITAI 1371 Introduction to Machine Learning (ML)	3
Semester 2 Hours	17
Semester III	
ITAI 2373 Natural Language Processing (NLP)	3
ITSC 1316 Linux Installation and Configuration	3
ENGL 1301 Composition I (Core 010)	3
MATH 1314 College Algebra (Core 020)	3
GOVT 2305-6 Federal Government or Texas Government (Core 070)	3
Semester 3 Hours	15
Semester IV	
DSAI 2375 Advanced Data Science and Analytics	3
ITAI 2377 Data Science in Artificial Intelligence (AI) (Capstone Course)	3
MATH 1342 Elementary Statistical Methods (Core 020)	3
Hum/Art Humanities/Fine Arts from the AAS General Education Course List	3
Semester 4 Hours	12
60 Semester Credit Hours	