Marketable Skills for Information Technology

Degree and Major: <u>Bachelor of Science in Information Technology</u>

After completing the **BS in information technology** degree program at UT Tyler, the student can:

Soft Skills:	Hard Skills:	Unique Features of Program
• Demonstrate proficiency in technical writing, oral and written communication, diagramming and requirements gathering.	• Demonstrate technical competence in the general software development life cycle: problem analysis, design, coding, testing, and implementation.	• Maximum credit for lower-division technical courses towards degree elective requirements.
• Demonstrate global awareness and social responsibility as related to the impact of automation, impact of technological advances, cybersecurity, ethics education, and intellectual property laws.	• Demonstrate proficiency in programming in a structured procedural language: logical thinking, problem solving, problem decomposition, and coding.	• Value-added curriculum whereby multiple computing tracks are selected for broad coverage of the computing field; core provides preparation for business professional success.
• Demonstrate leadership and teamwork by working in groups to achieve goals of software development.	• Demonstrate proficiency in programming in an object-oriented language: logical thinking, problem solving, problem decomposition, and coding.	• Throughout their degree program, students acquire coding skills for problem applications using languages across multiple programming paradigms.
• Use techniques of business intelligence and analysis to solve business problems.	• Demonstrate an understanding of structured systems including basic computer organization.	• Success coaches provide beyond-classroom assistance for lower-division course programming objectives.
• Demonstrate technical knowledge of all aspects of cybersecurity including standards, compliance, and management.	• Demonstrate the ability to design and operate a computer network using CISCO routers and various network operating systems.	• Students throughout their degree program are provided opportunities for hands-on experiences in specialized computing laboratories and classrooms..
	• Demonstrate an ability to design applications, databases, and cybersecurity technologies.	• Multidisciplinary teamwork required in capstone projects with other (i.e. CS and CIS) computing degree majors.
	• Demonstrate a broad understanding of at least two of the following track areas: cybersecurity, data analytics, programming, computer architecture, data management, and entrepreneurship.	• Special topic electives provide students with contemporary knowledge and skills for current aspects of IT computing and employment preparation.
		• Special career success opportunities linking students with prospective employers for jobs and internships.