ABOUT THE PROGRAM

The program curriculum focuses on programming principles, including web application development, mobile device development, database administration, and integration of web marketing and website design.

PROGRAM OUTCOMES

• Design software systems.
• Integrate database technologies.
• Develop software applications.
• Develop technical documentation.

CAREER AND EDUCATION ADVANCEMENT OPPORTUNITIES

LTC credits transfer to over 30 universities. For more information visit gotoltc.edu/future-students/transfer.

PROGRAM ADMISSIONS STEPS

• Work with Career Coach to:
 - Submit application and $30 fee.
 - Submit official transcripts (high school and other colleges).

ENROLLMENT PROCESS

• Work with program Academic Advisor to:
 - Complete an assessment for placement (Accuplacer or ACT).
 - Complete Functional Abilities Statement of Understanding form.
 - Meet to plan your first semester schedule, review your entire plan of study, discuss placement assessment results and complete any additional enrollment requirements.

APPROXIMATE COSTS

• $132.20 per credit tuition (WI resident) plus $7.27 per credit student activity fee. $10 per credit online fee. Material fee varies depending on course. Other fees vary by program. Visit gotoltc.edu/financial-aid/tuition-and-fees for details.

FINANCIAL AID

This program is eligible for financial aid. Visit gotoltc.edu/Financial-Aid or talk with your Career Coach about how to apply for aid.

SPECIAL NOTE

It is recommended that students have a home laptop. Students are strongly encouraged to take Written Communications during the summer before program start, General Education courses during summer break allowing concentrated time during semesters for core program courses, and Math with Business Applications in the first semester.

CONTACT

LTC Career Coach
920.693.1162 • CareerCoach@gotoltc.edu

Catalog No.	Class Title	Credit(s)
Term 1		
10152196	Web Development 1	3
10152120	Programming 1	1
10152121	Programming 2	3
10152124	Intro to Database Design & Development	2
10804123	Math with Business Applications	3
		12
Term 2		
10152199	Web Development 2	4
10152187	Web Development 3	4
10201118	Advancements in Web Design and Development	2
10801195	Written Communication OR 10801136 English Composition 1	3
		13
Term 3 (Summer)		
10809195	Economics OR 10809166 Introduction to Ethics	3
10801196	Oral/Interpersonal Communication OR 10801198 Speech	3
		6
Term 4		
10152123	Mobile Device Development 1	3
10152106	Integrated Web Concepts	4
10152109	Object-Oriented Programming 1	4
10809112	Principles of Sustainability OR 10809122 Introduction to American Government	3
10809196	Introduction to Sociology OR 10809172 Introduction to Diversity Studies	3
		17
Term 5		
10152112	Object-Oriented Programming 2	4
10152114	Mobile Device Development 2	3
10152192	Web and Software Developer-Capstone Project	3
10152115	Internship - Web and Software Developer	1
10152119	Portfolio Assessment-Web & Software Dev	1
10809198	Introduction to Psychology OR 10809188 Developmental Psychology	3
		15
	TOTAL	**63**

ADVANCEMENTS IN WEB AND DEVELOPMENT...will explore the latest trends in Web design and development. Students will apply advanced techniques to create progressive and contemporary websites. PREREQUISITE: 10152196 Web Development 1

ECONOMICS...provides the participant with an overview of how a market-oriented economic system operates, and it surveys the factors which influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems. growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues.

INTEGRATED WEB CONCEPTS...introduces the student to the three major components of the Web -- design, development, and marketing. A common course among Graphic and Web Design, Web and Software Developer, and Marketing, students from each program will be responsible for working in teams and to coordinate projects and present their industry to students from the other programs. PREREQUISITE: 10104102 Prin of Mktg and 101043 Mktg prog req met or 10152187 Web Dev 3 or COREQUISITE: 10201106 CSS for Adv Web Design and CONDITION: 101527 Web & Software Developer or 102012 Graphic & Web Design

INTERNSHIP-WEB AND SOFTWARE DEVELOPER...requires students to complete 72 hours of performing work in a business/industrial service setting related to their program objectives. Students are responsible for seeking and obtaining the internship workstation position. Course requirements including maintaining a log of work activities, identifying and receiving approval from the job supervisor and instructor, completing a work-related project, and an assessment of the student's portfolio. Students meet periodically at LTC. PREREQUISITE: 10152109 Programming 1 and 10152123 Mobile Device Development 1 and 10152106 Integrated Web Concepts and CONDITION: 101527 Web and Software Developer program requirements met

INTRO TO DATABASE DESIGN AND DEVELOPMENT...introduces the student to DBMS components, the design and development of databases, table relationships, SQL, database best practices and database integration with web applications.

INTRODUCTION TO PSYCHOLOGY...introduces students to a survey of the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings.

INTRODUCTION TO SOCIOLOGY...introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions, including family, government, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, social organization, and workplace issues. COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

MATH WITH BUSINESS APPLICATIONS...covers real numbers, basic operations, linear equations, proportions with one variable, percents, simple interest, compound interest, annuity, apply math concepts to the purchasing/buying process, apply math concepts to the selling process, and basic statistics with business/consumer applications. PREREQUISITE: 10834109 Pre-Algebra or equivalent and COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent or CONDITION: 610061 Agribusiness/ Agronomy Basic program admissions requirements met

MOBILE DEVICE DEVELOPMENT 1...introduces students to building hybrid mobile applications using HTML, CSS, and JavaScript, specifically the jQTouch and JQuery mobile frameworks. Students will create applications for Google Play and the Apple Store using the PhoneGap framework. PREREQUISITES: 10152199 Web Development 2 and 10201118 Advancements in Web Design & Development and 10152187 Web Development 3

MOBILE DEVICE DEVELOPMENT 2...will build upon the skills learned in Mobile Device Development 1 by building advanced hybrid mobile applications. PREREQUISITE: 10152123 Mobile Device Development 1

OBJECT-ORIENTED PROGRAMMING 1...introduces students to the Java programming language and object-oriented programming (OOP) concepts. Students will use the Java programming language and OOP to create desktop applications and server-side applications and services. PREREQUISITE: 10152187 Web Dev 3

OBJECT-ORIENTED PROGRAMMING 2...introduces learner to Microsoft's .NET platform, .NET frameworks, content-managed Web sites, and Web server architecture. Students will develop interactive and dynamic web applications using the Microsoft ASP. NET, MVC architecture, and ADO.NET components to access data and data services through the creation of data-driven ASP.NET web pages, configuration of an ASP.NET application, the deployment of an ASP.NET application and the creation of XML web services.Microsoft SQL Server is used. PREREQUISITE: 10152109 Programming 1

ORAL/INTERPERSONAL COMMUNICATION...provides students with the skills to develop speaking, verbal and nonverbal communication, and listening skills through individual speeches, group activities, and other projects. COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

PORTFOLIO ASSESSMENT - WEB AND SOFTWARE DEVELOPER...assesses what the student has learned through the Web and Software Developer degree. The course will focus on the continued development of their electronic career portfolio, the freelance/contract software development market, the analysis of the achievement of their core abilities and program outcomes, and job search topics such as resumes, cover letters, and interview skills. PREREQUISITES: 10152123 Mobile Device Dev 1 and 10152106 Integrated Web Concepts and 10152109 Object-Oriented Programming 1 and CONDITION: 101527 Web and Software Dev admissions requirements met

PRINCIPLES OF SUSTAINABILITY...prepares the student to develop sustainable literacy, analyze interconnections among physical and biological sciences and environmental systems, summarize effects of sustainability on health and well-being, analyze connections among social, economic, and environmental systems, employ energy conservation strategies to reduce use of fossil fuels, investigate alternative energy options, evaluate options to current waste disposal/recycling in the U.S., and analyze approaches used by your community.

PROGRAMMING 1...introduces students to the concepts of programming with no coding. Using flowcharts, students will learn about the concepts of variables, data types, decision, loops, and arrays.

PROGRAMMING 2...builds on the concepts mastered in Programming 1 by introducing coding techniques using the JavaScript scripting language. Students will learn how to write code using variables, data types, decisions, loops, and arrays. COREQUISITE: 10152120 Programming 1

WEB AND SOFTWARE DEVELOPER-CAPSTONE PROJECT...reinforces all program content by requiring students to plan, design, analyze, and develop a piece of software of their choice. Students will learn about concepts related to systems analysis and design and investigate and apply emerging development trends. PREREQUISITE: 10152199 Web Dev 2, 10152187 Web Dev 3, 10152123 Mobile Device Dev 1, and 10152106 Integrated Web Concepts and 10152109 Object Oriented Programming 1

WEB DEVELOPMENT 1...introduces the students to web page design principles and proceeds to teach students how to create their own visually appealing designs for the web. Students will have hands-on experience using current versions of Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS) to code and format accessible, valid, and optimized web sites. Websites will be published live on the web using FTP.

WEB DEVELOPMENT 2...introduces the student to the JQuery JavaScript framework for developing dynamic client-side Web pages. PREREQUISITE: 10152196 Web Development 1 and 10152121 Programming 2

WEB DEVELOPMENT 3...introduces the learner to PHP, MySQL, PHP frameworks, content-managed Web sites, and Web server architecture. Topics covered include an introduction to the Apache Web server, server-side scripting, PHP control logic and functions, controlling state using sessions and cookies, querying database content and population to an HTML Web page, MySQL relational database administration, and processing form information and populating it to a MySQL database. PREREQUISITES: 10152121 Programming 2 and 10152196 Web Development 1 and 10152124 Intro to Database Design and Development

WRITTEN COMMUNICATION...teaches the writing process, which includes prewriting, drafting, revising, and editing. Through a variety of writing assignments, the student will analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Keyboarding skills are required for this course. It also develops critical reading and thinking skills through the analysis of a variety of written documents. PREREQUISITE: 10831103 Intro to College Wrtg equivalent and COREQUISITE: 10838105 Intro Rdg & Study Skills or equivalent