

**Program Number 30-152-4
Technical Diploma • Two Terms**

ABOUT THE PROGRAM

The program focuses on foundational programming principles with an emphasis on web development, including web application development, database administration, and website design. Students gain hands-on experience creating responsive, user-focused websites and introductory web applications using current front-end tools and development practices. Emphasis is placed on core programming concepts, web standards, and building practical solutions that support modern, data-aware applications.

PROGRAM OUTCOMES

- Design web sites or applications.
- Utilize essential data technologies.
- Develop basic applications.

CAREER AND EDUCATION ADVANCEMENT OPPORTUNITIES

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

ADMISSIONS AND FIRST SEMESTER ENROLLMENT STEPS

- Submit online application.
- Complete the online Student Success Questionnaire.
- Complete Get Started at Lakeshore appointment.

**Submit high school transcripts, college transcripts, and test scores (optional, highly recommended). Official transcripts will be needed for transferring college credit(s) and for financial aid purposes.*

ACADEMIC PREPAREDNESS/FUTURE SEMESTER ENROLLMENT STEPS

If applicable, complete program-specific academic preparedness requirements and enrollment steps prior to enrolling in occupational or core courses. Students will be notified if there is a program waitlist. View the college's program webpage for details: <https://lakeshore.edu/programs-and-courses/career-areas/information-technology-it/it-web-development-specialist>.

APPROXIMATE COSTS

\$157.45 per credit tuition (WI resident) plus \$9.45 per credit student activity fee. Material fee varies depending on course. Other fees vary by program. Visit <https://lakeshore.edu/paying-for-college/tuition-and-fees> for details.

FINANCIAL AID

This program is eligible for financial aid. Visit lakeshore.edu/Financial-Aid or talk with your College Recruiter about how to apply for aid.

SPECIAL NOTE

- Students are required to have access to a computer with internet connectivity. Computers are available at Lakeshore's campuses for those students who do not have a computer and/or internet access at home.
- Students are required to purchase a domain name and web hosting in Term 2. The approximate cost is \$60 per term.
- Accelerate your learning, earn credit for what you know, and get personalized support to reach your goals. The full CBE definition may be found at lakeshore.edu/CBE.

CONTACT

Lakeshore College Recruiter
920.693.1366 • Recruitment@lakeshore.edu

Catalog No.	Class Title	Credit(s)
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Term 1

10152233	Introduction to Web Development*	3
10152234	Programming Introduction*	3
10156101	Data Concepts*	3
10804133	Math & Logic	3
		12

Term 2

10152236	Advanced Front-End Development*	3
10152237	Introduction to JavaScript*	3
10152238	Introduction to PHP*	3
		9

TOTAL 21

*CBE delivery only

ADVANCED FRONT-END DEVELOPMENT...apply advanced learned techniques to create responsive, accessible, and performance-optimized web applications using advanced HTML, CSS, and JavaScript techniques. Students will evaluate user interface (UI) and user experience (UX) best practices. PREREQUISITE: 10152233 Introduction to Web Development or 10152196 Web Development 1

DATA CONCEPTS...introduces students to the foundational principles of data, including how data is stored, structured, and analyzed. Students will explore relational databases, data querying, and visualization techniques. Hands-on projects using SQL and reporting tools will reinforce key concepts.

INTRODUCTION TO JAVASCRIPT...design and implement interactive web applications using JavaScript. Write client-side code that utilizes events, conditionals, loops, arrays, and functions to dynamically modify web content and user experiences. Introduces modern JavaScript libraries and frameworks—including jQuery, jQuery UI, and React—to streamline development, manage state, and build reusable components. Emphasis placed on best practices for DOM manipulation, UI enhancement, and responsive behavior. PREREQUISITE: 10152234 or 10152100 Programming Introduction

INTRODUCTION TO PHP...create dynamic websites using PHP and MySQL. Students will design forms, process user input, manage sessions and cookies, and query databases to deliver web content. Emphasis is placed on logic, scripting, and server-client communication. PREREQUISITES: 10156101 Data Concepts or 10152232 Intro to Database Design & Dev, and 10152233 Introduction to Web Development or 10152196 Web Development 1

INTRODUCTION TO WEB DEVELOPMENT...learn the principles of web page design by creating accessible, standards-compliant websites using HTML and CSS. Students will apply layout, formatting, and styling techniques. The course emphasizes current trends, responsive design, and usability best practices.

MATH & LOGIC...will apply mathematical problem solving techniques. Topics will include symbolic logic, sets, algebra, Boolean algebra, and number bases. Discuss math and reading academic course support with your Counselor.

PROGRAMMING INTRODUCTION...develop problem-solving and logical thinking skills by learning to design, plan, and implement basic computer programs. Students will construct flowcharts, write pseudocode, and code solutions using fundamental concepts such as variables, data types, conditionals, loops, arrays, and functions.