WEB DEVELOPMENT

Program Description
The Web Development program provides graduates with the necessary skills and knowledge to design, create, and maintain websites that are well-coded, efficient, aesthetically pleasing, useful, data-driven, and user-friendly. Typical job titles for graduates from the program include web developer, webmaster, data analyst, web designer, content manager, and software developer. Coursework includes training in mobile and web development, including open-source and proprietary object-oriented and scripting languages; industry-standard database creation and data retrieval; good coding practices and programming logic; website design; navigation paradigms; data structures; and structure query language (SQL) and its use with database management systems. It also includes the study of operating systems, including Windows and Linux/Unix development.

Courses are divided between content lectures, hands-on demonstration, and practice. Arts & Sciences curriculum enhances the skills necessary for students to be successful in their career, including technical writing, communication, and math courses designed specifically for computer students.

Dunwoody College of Technology: a non-profit, private technical college since 1914.

Credential Earned: AAS Degree
Classes Offered: Evening
Length of Program: 2 years (4 semesters)
Available Starts: Fall Semester only; for Fall only starts, students can take Arts & Sciences courses in Spring
Further Study: Bachelor’s Completion Degree in Computer Systems Analysis or Applied Management with a concentration in Management Information Systems (MIS)

Degree Requirements
CDEV1010  Introduction to Web Development
CDEV1011  Programming Fundamentals I
CNET1110  Computer Systems
CDEV1110  Advanced Programming
CDEV1111  Programming Fundamentals II
CDEV1120  Data Organization
CDEV2000  Business Architecture
CDEV2011  Business Applications
CDEV2020  Databases: Philosophy & Practice
CDEV2110  Web Publishing
CNET2220  Open Source Software
MATH1250  Boolean Algebra
MATH1050  Algebra, Trigonometry & Geometry
COMM1150  Interpersonal Communication
WRIT2010  Technical Writing

Recent Employers
Calabrio
C.H. Robinson
PowerObjects

Salary Data
$70,610*
Annual Average Salary

Placement Rate
80%**

How to Apply
dunwoody.edu
612.374.5800
info@dunwoody.edu
Course Descriptions

CDEV1010 Introduction to Web Development, 3 cr.
Hypertext Markup Language (HTML). Basic page structure, tags, link, text formatting, forms, tables, and debugging with trouble-shooting skills. Cascading Style Sheets (CSS), advanced formatting and layout. Integration of web scripting languages (like JavaScript) into existing web pages to increase user-friendliness and functionality. Creation of scripts for new pages.

CDEV1011 Programming Fundamentals I, 2 cr.
Basic programming principles like data types, variables, expressions, operators, Boolean Logic, algorithm creation, flowcharts. Structured programming and programming logic constructs (sequence, selection, and loops). Abstraction, modularization, dynamic and static data structures.

CNET1110 Computer Systems, 5 cr.
Apply electronic theory, Boolean logic, utilization of hex editors and assembly language to understand the underpinning technologies that make computers systems work. Maintenance and repair of computer operating systems, hardware, peripherals, and component selection/installation for machines commonly found in a business.

CDEV1110 Advanced Programming, 4 cr.
Create windows based applications. High-level, event-driven programming language concepts with an emphasis on user interface. Advanced object-oriented languages.

CDEV1111 Programming Fundamentals II, 2 cr.

CDEV1120 Data Organization, 4 cr.
Language syntax, document model, document types, schemas and stylesheets from extensible Markup Language (XML) with a focus on creating structured content and data for business application. Integration of relational database concepts and design of database management systems for enterprise information needs. Business rules analyzed to diagram data models with Unified Modeling Language (UML). Structured Query Language (SQL) used for data definition to construct physical databases, for data manipulation and for data computation.

CDEV2000 Business Architecture, 3 cr.
Business concepts such as human resource development, marketing, investing, security, legal, and entrepreneurship. Types of businesses including e-commerce, consulting, outsourcing, and training topics. Various development approaches for software development from traditional systems analysis to contemporary agile methods and beyond. Developing models and prototypes to practice the processes and techniques needed to design and build quality software systems.

CDEV2011 Business Applications, 4 cr.
Transition of static HTML web sites to complex data integrated applications. Server-side scripting. Difference between coding a page and coding a site or full project. Customization and integration of many complex pieces of code and parts of a web site into a single cohesive web application.

CDEV2020 Databases: Philosophy & Practice, 3 cr.
Structured Query Language, database normalization, database management systems (DBMS), implementation-independent database design, security. Database server technology for enterprise-class data services and complex business logic. Server architecture, data integrity, data types, indexing, constraints, stored procedures, database schemas.

CDEV2110 Web Publishing, 5 cr.
Techniques central to web publishing. Open-source and proprietary languages built for the web. Tools used to publish content online. Interactive, data-driven web applications for web storefronts. Scripting templates, databases, file system, directories and other enterprise systems for developing web application services.

CNET2220 Open Source Software, 5 cr.
Install, configure, maintain, and manage a wide variety of Open Source Software (OSS) including OSS desktop productivity software; the history of the open source movement. Configure OSS operating systems to support common client-servers, Web hosting, and other services commonly found at the enterprise and ISP levels of industry.

MATH1250 Boolean Algebra, 3 cr.
Binary, octal and hexadecimal number systems. Boolean algebra and mapping.

MATH1050 Algebra, Trigonometry & Geometry, 3 cr.
Principles of algebra, geometry and trigonometry used in the context of a technical setting. Problem-solving strategies are developed and applied to technology.

COMM1150 Interpersonal Communication, 3 cr.
Analyze the process of interpersonal communication as a dynamic and complex system of interactions. Integrate interpersonal communication theory into work, family and social relationships. Apply fundamental tools needed to provide quality customer service. Decision making, problem solving, and managing customer service processes are emphasized.

WRIT2010 Technical Writing, 3 cr.
Technical writing applications are studied for format, style, voice, and point of view; considered for purpose, audience, and subject. Critical thinking and developed expertise are employed to analyze, interpret, evaluate, summarize and generate various technical documents, individually and within teams.