COMPUTER SCIENCE AND INFORMATION SYSTEMS
DIGITAL WEB AND MOBILE DEVELOPMENT

PROGRAMS

- Associate of Science (A.S.)
- Certificates of Achievement

DESCRIPTION

The Digital Web and Mobile Development program is designed for students who are interested in entering the fast-paced fields of web development and mobile app development. A student will learn the latest in web languages, basic web and mobile programming and appropriate use of digital media by building a digital portfolio of their work. Students can focus on either web development or mobile app development through the certificate program or combine the two disciplines for an Associate’s degree. Many of these courses are offered in the online environment to accommodate those students who are presently employed. The web and mobile degree option emphasizes the following competencies: managing the development of a project, delivery of comprehensive, integrated digital media via the web or mobile application. Students will also develop a set of customer liaison skills as they integrating all facets of digital media into an effective web or mobile application. As a result of ongoing changes in technology, the need to expand competencies, and changing transfer requirements, certificate and degree requirements may also change. If you note changes in degrees or certificate requirements, or if courses are not offered in a particular semester, please consult with a counselor or faculty member on how best to complete the program in which you are enrolled.

LEADS TO CAREER OPPORTUNITIES SUCH AS:

- Advertising Sales Representative or Executive
- Graphic Designer
- Marketing Manager
- Public Relations Specialist
- Web Developer

TRANSFER PREPARATION

Courses that fulfill major requirements for an associate degree may differ from those needed to prepare for transfer. Students who plan to transfer to a four-year college or university should schedule an appointment with a Hartnell College counselor to develop a student education plan before beginning their program.

TRANSFER RESOURCES

www.ASSIST.org – CSU and UC Articulation Agreements and Major Search Engine

CSU System Information -
http://www2.calstate.edu

FINANCIAL AID

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https://www.hartnell.edu/students/fa/net-price-calculator.html
# ASSOCIATE OF SCIENCE

**COMPUTER SCIENCE AND INFORMATION SYSTEMS**

**DIGITAL WEB AND MOBILE DEVELOPMENT (AS.DWMD)**

**Program Outcomes:** Upon successful completion of this program a student will be able to:
- anticipate, identify and solve technical and design issues by applying current design standards
- apply knowledge in a variety of computer proficiency areas including web languages, software applications, file transfer protocol, and web and app configuration.

## Required Major Courses (14 units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-32</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>CSS-25</td>
<td>Multimedia Integration</td>
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<td>CSS-27</td>
<td>Project Management using Microsoft Project</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-64</td>
<td>HTML 5 and CSS3 – Web Development</td>
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## Major Electives A (Complete 8 units)

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<td>CSS-74</td>
<td>Wordpress for Websites</td>
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</tr>
<tr>
<td>CSS-76</td>
<td>Android App Development Using Java</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-86</td>
<td>Flash Design</td>
<td>4.0</td>
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## Major Electives B (Complete an additional 8 units)

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<tbody>
<tr>
<td>CSS-29</td>
<td>Programming for Multimedia</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-76</td>
<td>Android App Development Using Java</td>
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</tr>
<tr>
<td>CSS-65</td>
<td>Introduction to IOS App Development</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-78</td>
<td>Mobile Game Design</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-84</td>
<td>Beginning Digital Cartooning in Flash</td>
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**SUBTOTAL: 30 UNITS**

## General Education – Required Courses

*Students must complete one of the following General Education Plans:*

- **HCCD GE** *(see page 68)*  MAT-126 or higher
  - Natural Sciences  Social & Behavioral Sciences  Humanities
  - Ethnic Groups in the US  Language and Rationality

**SUBTOTAL: 21 UNITS**

*Students can double-count required courses and courses for General Education*

- **Electives (Courses Numbered 1-199) required when degree units plus GE units total fewer than 60.**

**TOTAL: 60 UNITS**
## COMPUTER SCIENCE AND INFORMATION SYSTEMS
### MOBILE DEVELOPMENT OPTION (CT.MD)

#### CERTIFICATE OF ACHIEVEMENT

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#### Required Major Courses (14 units)
- BUS-32 – Introduction to Business 3.0
- CSS-25 – Multimedia Integration 3.0
- CSS-27 – Project Management using Microsoft Project 4.0
- CSS-64 – HTML 5 and CSS3 – Web Development 4.0

#### Major Electives (Complete 8 units)
- CSS-76 – Android App Development Using Java 4.0
- CSS-65 – Introduction IOS App Development 4.0

#### Other Required Courses
- ENG-101* – Intermediate Composition and Reading 3.0
- ESL-101* – Academic Writing & Reading II 5.0
- MAT-123** – Intermediate Algebra 5.0

**TOTAL: 22 UNITS**

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*Eligibility for ENG-1A or ENG-1AX fulfills this requirement.

**Eligibility for MAT-123 or any higher level math class fulfills this requirement.

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**GAINFUL EMPLOYMENT INFORMATION:**
See the certificate program cost and the employment outlook for graduates by clicking the link below:
[http://www.hartnell.edu/gainful-employment-certificate-programs-0](http://www.hartnell.edu/gainful-employment-certificate-programs-0)

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# COMPUTER SCIENCE AND INFORMATION SYSTEMS

## WEB DEVELOPMENT OPTION (CT.WD)

### CERTIFICATE OF ACHIEVEMENT

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