

# SOFTWARE AND APP DESIGN 11.0202.00

## Program Description, Industry Credential, Coherent Sequence, and Teacher Certification

### PROGRAM DESCRIPTION

The **Software and App Design** instructional program prepares students to apply basic engineering principles and technical skills to support engineers in developing, implementing, and evaluating computer software and program applications. Throughout the **Software and App Design** instructional program, students learn how to program, programming languages, databases, user interfaces, networking and warehousing, encryption and security, software testing and evaluation, and customization.

The **Software and App Design** Career and Technical Education program is delivered as a coherent sequence of courses designed to offer students knowledge and skills that meet the needs of the workplace. The Professional Skills developed by business and industry leaders across Arizona are integrated throughout the program. **Software and App Design** students develop leadership, social, civic, and career skills through participation in the state-recognized Career and Technical Student Organizations, SkillsUSA or FBLA (Future Business Leaders of America).

The **Software and App Design** instructional program prepares students for entry-level employment, further training, and/or post-secondary education for these and other occupations: Certified Professional, Coder, Coder 1, Coding Specialist, Coding Technician, Help Desk, Technician/Manager, Information Architect, IT Designer, PC Technician, Program Analyst Systems Analyst, Software Developer, Software Tester Intern, Systems Operations Specialist, Technical Sales Representative, Technical Support, Technician/Manager, Technology Intern, and UI/UX Designer

### INDUSTRY CREDENTIALS

The following credentials have been approved for the A-F CCR and are CTED eligible for the **Software and App Design** instructional program:

- Certified Internet Web (CIW) JavaScript Specialist
- CompTIA - A+
- CompTIA - IT Fundamentals
- CompTIA - Security +
- CSX Cybersecurity Fundamentals Certificate
- Microsoft Technology Associate (MTA)
- Swift Certification App Dev - Level 1

The following credential has been approved to meet CTED eligibility for the **Software and App Design** instructional program:

- Oracle Certified Associate, Java SE 8 Programmer
- Oracle Certified, Java Junior

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## COHERENT SEQUENCE

11.0202.13 – Software and App Design I, **and**

11.0202.40 – Software and App Design II, **and program may elect to add:**

11.0202.45 – Software and App Design III, **or**

11.0202.49 – Software and App Design IV, **or**

11.0202.72 – Software and App Design – DCE (Diversified Cooperative Education) **or**

11.0202.77 – Software and App Design – Internship, **or**

11.0202.82 – Software and App Design – Cooperative Education

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### TEACHER CERTIFICATION REQUIREMENTS

The instructor must be ADE/CTE certified in one of the following Certificates:

<b>SCTBM</b>	Standard Career and Technical Education Business and Marketing
<b>SSCTEBM</b>	Standard Specialized Career and Technical Education Business and Marketing
<b>SCTIET</b>	Standard Career and Technical Education Industrial and Emerging Technologies
<b>SSCTEIET</b>	Standard Specialized Career and Technical Education Industrial and Emerging Technologies

- Note:
- Software and App Design 11.0202.72 (DCE) requires a CTE Teacher to have the Cooperative Education Endorsement (CEN).
  - Software and App Design 11.0202.77 (Internship) **does not** require a CTE Teacher to have a Cooperative Education Endorsement (CEN).
  - Software and App Design 11.0202.82(Cooperative Ed.) requires CTE Teacher to be appropriately certified for the program and to have a Cooperative Education Endorsement (CEN).