

# Arts, Information and Communication: Design

Use basic methods of data collection and analysis to provide information for projects. ARDS01

- 1 Access research methods available to formulate project planning and problem solving. ARDS01.01.01
- 2 Provide appropriate precedents for development of a project. ARDS01.02.01

Understand the role of clients in the design process. ARDS02

- 1 Understand customer requirements. ARDS02.01.01
- 2 Interpret and evaluate requirements. ARDS02.01.02
- 3 Define scope of work to meet customer requirements. ARDS02.01.03
- 4 Prepare functional specifications to meet customer requirements. ARDS02.01.04
- 5 Prepare visual design specifications to meet customer requirements. ARDS02.01.05
- 6 Create a customer presentation. ARDS02.01.06

Understand, plan for, and implement traditional project phases. ARDS03

- 1 Understand and implement the programming components of design. ARDS03.01.01
- 2 Understand and implement the planning components of design. ARDS03.01.02
- 3 Understand and implement the product design components. ARDS03.01.03
- 4 Understand and implement the presentation components of the design process. ARDS03.01.04

Appreciate and apply design requirements/elements for the diversity of needs, values, and social patterns in project design. ARDS04

- 1 Understand how design is impacted by needs, values, social patterns, and preferences. ARDS04.01.01
- 2 Understand the basic principles of the environmental impact of a design project. ARDS04.01.02
- 3 Evaluate and align sustainable design elements to add value to the project. ARDS04.01.03

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**4 Apply design requirements to accommodate people with varying physical disabilities.** ARDS04.01.04

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**Understand principles of fabrication/manufacturing and use of materials, components, and assemblies, and incorporate them into project design.** ARDS05

**1 Understand the characteristics and properties of materials and components used in design.** ARDS05.01.01

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**2 Understand the fabrication/manufacturing processes.** ARDS05.01.02

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**3 Understand the standards and regulations used in fabrication or manufacturing of products being designed.** ARDS05.01.03

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**4 Understand the restrictions that fabrication or manufacturing impose on the design.** ARDS05.01.04

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**5 Incorporate principles, standards and restrictions of fabrication and manufacturing and use of materials, components and assemblies into the project design.** ARDS05.01.05

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**Analyze and use the elements and principles of design.** ARDS06.01.01

**1 Understand the elements of design including space, line, balance, color, shape, texture, form, unity and value.** ARDS06

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**2 Understand the principles of design including harmony, contrast, repetition, variety, emphasis, proportion, functionality, proximity, and color theory.** ARDS06.02.01

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**3 Understand color symbolism, perception and psychology.** ARDS06.03.01

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**4 Understand the concepts of visual perception.** ARDS06.04.01

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**5 Use appropriate material or combinations of material and components to satisfy the requirements of the customer.** ARDS06.05.01

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**6 Use the elements and principles of design to create designs using various materials and techniques.** ARDS06.06.01

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**Understand and use appropriate software for the purposes of design.** ARDS07

**1 Know available design software and its intended purpose.** ARDS07.01.01

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**2 Select appropriate software.** ARDS07.01.02

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**Understand three-dimensional art forms.** ARDS08

**1 Understand the basic elements of three-dimensional art forms.** ARDS08.01.01

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**2 Design three-dimensional art forms.** ARDS08.01.02

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