

# Stage 3 BCATS Project

GUIDE FOR LEVEL 3 BUILDING, CONSTRUCTION, AND ALLIED TRADES SKILLS  
(BCATS) UNIT STANDARDS

---



**Building and Construction Industry Training Organisation (BCITO)**

---

**Level 5, 234 Wakefield Street**

**PO Box 2615**

**Wellington 6140**

**0800 422 486**

**[www.bcito.org.nz](http://www.bcito.org.nz)**

**© 2017 BCITO**

All rights reserved.

No part of this work may be reproduced, adapted, modified, copied or transmitted in any form or by any means, including by way of example only, written, graphic, electronic, mechanical, reprographic, photocopying, recording, taping or information retrieval systems, without the written permission of the publisher.

# INTRODUCTION

---

The Level 3 Building, Construction, and Allied Trades Skills (BCATS) unit standards require students to undertake a 'Stage 3 BCATS project' as evidence for assessment. The size and scale of any Stage 3 BCATS project will depend on the industry, environment, and circumstances within which it occurs; a project undertaken solely within the school's/provider's workshop would be different from one undertaken during industry placements or out in the community.

This *Stage 3 BCATS Project Quick Guide* expands the 'Stage 3 BCATS Project' section of the *Assessment Guidelines for Level 3 BCATS Unit Standards*. It will help all members of the teaching and assessment team (teachers/co-ordinators, students, employers, BCITO staff) visualise how projects can be undertaken in any environment, whether this be under the direction of a teacher or an employer.

## The New Zealand Qualifications Framework

The Level 3 BCATS unit standards are at Level 3 of the ten levels of the New Zealand Qualifications Framework (NZQF). The table below shows how expectations differ according to whether a unit standard (or qualification) is Level 1, 2, or 3. Stage 3 BCATS projects must meet the criteria for Level 3.

### NZQF Level Descriptors – Levels 1-3

| Level 1  | Level 2  | Level 3   |
|--|--|---|
| Qualifies individuals with basic knowledge and skills for work, further learning and/or community involvement. | Qualifies individuals with introductory knowledge and skills for a field(s)/ areas of work or study. | Qualifies individuals with knowledge and skills for a specific role(s) within fields/areas of work and/or preparation for further study.  |
| <b>Graduates are able to:</b>  | <b>Graduates are able to:</b>  | <b>Graduates are able to:</b>   |
| Demonstrate basic general and/or foundation knowledge  | Demonstrate basic factual and/or operational knowledge of a field of work or study                   | Demonstrate some operational and theoretical knowledge in a field of work or study  |
| Apply basic skills required to carry out simple tasks  | Apply standard processes relevant to the field of work or study                                      | Apply a range of standard processes relevant to the field of work or study  |
| Apply basic solutions to simple problems   | Apply known solutions to familiar problems   | Select from and apply a range of known solutions, select and apply them to familiar problems  |
| Apply literacy and numeracy skills for participation in everyday life  | Apply literacy and numeracy skills relevant to the role in the field of work or study                | Apply literacy and numeracy skills relevant to the role in the field of work or study   |
| Work in a highly structured context (direct supervision)   | Work under general supervision   | Work under limited supervision (can include periods of direct and/or general supervision)   |
| Demonstrate some responsibility for own learning   | Demonstrate some responsibility for own learning and performance                                     | Demonstrate major responsibility for own learning and performance   |
| Interact with others   | Collaborate with others  | Contribute to group performance<br>Apply a range of communication skills relevant to the role in the field of work or study<br>Adapt own behaviour when interacting with others |

## What is a 'Stage 3 BCATS project'?

A Stage 3 BCATS project is one undertaken in a BCATS environment under limited supervision, using a broad range of tools, equipment, machinery and materials, and involving a range of standard processes.

Depending on the project, 'undertake' could consist of building, constructing, installing, assembling, applying, or any other project activity appropriate to the trade(s) being experienced, or any combination of these activities.

The Level 3 unit standards do not specify particular projects. Instead, what determines a project's suitability is its complexity and the ability to meet unit standards' outcomes at Level 3. The word "project" will automatically bring visions of a student completing something in its entirety, which in many cases is exactly what students will opt to do. For others, the finished form (such as a relocatable house) is far outside what the school, class, or employer can offer each individual and so the larger project becomes composed of any number of individual projects.

### Project suitability

The following questions may help determine if the project is suitable for a Stage 3 project. Please note that these questions apply regardless of where the project is being undertaken.

- ⊗ Does the project require a range of materials?
- ⊗ Will the student need to make some judgements about what materials are suitable?
- ⊗ Does the project require tools, equipment and machinery common to the trade the student has chosen to focus on?
- ⊗ Will the student be able to select and use the tools and equipment with little or no guidance?
- ⊗ Will the student be permitted to use the machinery themselves?
- ⊗ Will the student have the opportunity to research (eg project ideas, materials, safety)?
- ⊗ Will the project require the teacher to supervise the student more than teach the student?
- ⊗ Will undertaking the project provide the student with opportunities to interact with people in different roles (eg client, supplier)?
- ⊗ Do you expect the student will encounter many new problems? If so, the project is more than expected at Level 3.
- ⊗ Does the project require non-standard processes? If so, the project is more than expected at Level 3.

### Projects undertaken in a workplace

The Level 3 BCATS unit standards have been written to be flexible enough that students can achieve credit for learning achieved in any BCATS environment, including in a workplace during industry placements. Teachers (and students) have control over pretty much all aspects of the project when it is undertaken in school workshops or as a class doing projects in the community, which makes defining a project comparatively easy.

On the other hand, those wishing to gain credit for work undertaken in a workplace (such as through Gateway, 3+2, or Trades Academy programmes) are almost entirely reliant on the opportunities available to them in the workplace.

Care needs to be taken to ensure that employers are aware of - and able to offer - the

types and breadth of work a student needs to experience, and that both student and employer can commit to sufficient days on-job throughout the school year.

Employers must also be willing and able to share relevant project documentation.

**Communication between school, student, and employer of expectations and requirements is critical. Care will need to be taken to ensure the Stage 3 BCATS project remains achievable.**

It is essential that all students enrolled in programmes involving learning and assessment in a workplace receive the learning support required. The BCITO needs to be assured that students' learning is appropriate and that assessment judgements are made by suitably-qualified and experienced assessors.

Stage 3 BCATS projects undertaken in a workplace have dimensions that by their very nature are more complex than those undertaken in a school environment.

- ⊗ Jobs don't stop on the days students aren't there, creating uncertainty of tasks from week to week that requires adaptability, resilience, and good communication between student and employer.
- ⊗ Students are likely to be working with those of a broad range of ages, some of whom may be considerably older. They also may have contact with clients. They therefore need to be able to step up in terms of maturity of behaviour, teamwork, and learning and following spoken and unspoken work rules.
- ⊗ Every task matters. Student's work won't simply result in a 'Not Achieved' if it isn't up to standard, it will cost – at the very least – money and time to correct. Similarly, achievement can't be condensed into an intensive 'catch up period', it must be sustained and built upon, week by week, over the school year.

The BCITO envisages that, by the end of their BCATS programme students would be good candidates for gaining permanent employment.

---

Below are some prompts to help students, employers, and programme co-ordinators consider what a Stage 3 BCATS project may look like in the workplace. They must be read in conjunction with the **Project suitability** questions on Page 4.

### **Carpentry – assist with constructing/renovating**

- ⊗ Use appropriate methods of moving materials
- ⊗ Assist colleagues on a number of aspects of construction/renovation
- ⊗ Measure, cut, and fit materials

### **Concrete construction – assist with placing concrete**

- ⊗ Move ready-mix concrete on site
- ⊗ Assist with setting out
- ⊗ Participate in checking set-up, levels, and falls
- ⊗ Assist in controlling slurry run-off
- ⊗ Assist with exposing aggregate
- ⊗ Demonstrate trowel skills

### **Joinery – assist with making cabinetry**

- ⊗ Assist with selecting and moving materials
- ⊗ Assist with assembling cabinetry
- ⊗ Use workshop machines under guidance
- ⊗ Use power tools
- ⊗ Perform edge banding
- ⊗ Sand solid timber
- ⊗ Install hardware
- ⊗ Assist with delivery (and installation)

### **Painting and decorating – assist with painting**

- ⊗ Assist with preparing surfaces, including cleaning and sanding
- ⊗ Assist with applying paint coatings
- ⊗ Know which types of paint to apply when and why
- ⊗ Measure and calculate volumes required

In all cases, it is expected that Level 3 BCATS graduates will have sufficient understanding, familiarity, and practice of a BCATS trade to form a good basis from which they can go on to gain commercial competence while undertaking post-school employment and training.

**Please remember that, regardless of who provides the learning context, assessment against BCATS unit standards must be done by a suitably qualified and experienced assessor.**

# HEALTH AND SAFETY

## Unit Standard 29677 (2 credits)

| Official compliance component   |   |
|---|---|
| Title   | Outcomes  |
| <b>Follow safe workplace practices, and contribute to a health and safety culture, in a BCATS environment</b> | <b>1. Follow safe workplace practices in a BCATS environment</b>  |
|   | 1.1. The workplace practices of the BCATS environment is explained in terms of relevant safety procedures and site-specific requirements.         |
|   | 1.2. Work tasks are completed in accordance with workplace practice.  |
|   | 1.3. Workplace, tools, equipment, and machinery are kept clean and safe, and are stored in accordance with workplace practice.                    |
|   | <b>2. Contribute to a health and safety culture in a BCATS environment</b>  |
|   | 2.1. Workplace health and safety induction processes are contributed to in accordance with workplace practice.                                    |
|   | 2.2. Site-specific safety requirements for the BCATS environment are understood and complied with.  |
|   | 2.3. Hazards are identified and assessed for risk, and controls are implemented, monitored, and documented in accordance with workplace practice. |
|   | 2.4. All accidents, incidents and near misses are reported, and followed up, in accordance with workplace practice.                               |
|   | 2.5. Workplace health and safety practices are applied in accordance with workplace practice and relevant specifications.                         |

| Practical assessment component  |   |   |  |
|---|---|---|--|
| Expects students to:  | Looks like:<br>In a <b>classroom</b> setting  | Looks like:<br>In a <b>workplace</b> setting  | Recorded on/in:  |
| <ul style="list-style-type: none"> <li>be aware of workplace health and safety practices</li> <li>follow safe practices throughout the project</li> <li>proactively contribute to a health and safety culture</li> <li>be aware of their environment and how their actions and inactions affect the safety of others</li> <li>recognise that situations can change as a project or job progresses which may create new hazards</li> </ul> | <ul style="list-style-type: none"> <li>completion of a Risk Hazard Control register</li> <li>consistent safe workshop practice, showing a clear understanding of and following health and safety procedures and requirements</li> <li>appropriate and consistent use of PPE</li> <li>reporting hazards, accidents, incidents, or near misses</li> <li>reporting any faulty or unsafe tools and machinery</li> <li>safe tool use, maintenance and storage</li> <li>following manufacturers' safety specifications and safety data sheets when using machinery and materials</li> </ul> | <ul style="list-style-type: none"> <li>completion of a Risk Hazard Control register</li> <li>consistent safe work-site practice, showing a clear understanding of and following health and safety procedures and requirements</li> <li>appropriate and consistent use of PPE</li> <li>reporting hazards, accidents, incidents, or near misses</li> <li>reporting any faulty or unsafe tools and machinery</li> <li>safe tool use, maintenance and storage</li> <li>notes taken at safety briefings or toolbox meetings</li> <li>following manufacturers' safety specifications and safety data sheets when using machinery and materials</li> </ul> | <ul style="list-style-type: none"> <li>Student work diary verified by assessor/ employer</li> <li>A Risk Hazard control register</li> <li>Assessment record sheet</li> </ul> |

More information in:

- BCITO's Level 3 BCATS **Health and Safety Handbook**
- Worksafe's website and Sitesafe's website
- BCITO's *The Health and Safety at Work Act 2015; A tradie's guide to the legislation*

**Note:** The above unit standard must be achieved throughout the project, from concept to conclusion.

# MATERIALS

## Unit Standard 29678 (4 credits)

| Official compliance component   |  |   |  |
|---|--|---|--|
| Title   | Outcomes   |   |  |
| <b>Demonstrate knowledge of, select, and use materials for a Stage 3 BCATS project</b>  | <b>1. Demonstrate knowledge of a broad range of materials used for a Stage 3 BCATS project</b>   |   |  |
|   | 1.1  | Materials are described in terms of their purpose and function for a Stage 3 BCATS project.   |  |
|   | 1.2  | Materials are identified and described in terms of their physical properties.   |  |
|   | 1.3  | The methods and reasons for using different types of materials are explained in accordance with specifications and workplace practice.  |  |
|   | 1.4  | The health and safety procedures when using different types of materials are described in accordance with specifications and workplace practice.  |  |
|   | <b>2. Select and use materials for a Stage 3 BCATS project</b>   |   |  |
|   | 2.1  | Material requirements for a Stage 3 BCATS project are confirmed in accordance with the BCATS project documentation.   |  |
|   | 2.2  | Materials are selected and the selection is justified.  |  |
|   | 2.3  | Selected materials are used safely to meet the Stage 3 BCATS project requirements.  |  |
| Practical assessment component  |  |   |  |
| Expects students to:  | Looks like:<br>In a <b>classroom</b> setting   | Looks like:<br>In a <b>workplace</b> setting  | Recorded on/in:  |
| <ul style="list-style-type: none"> <li>learn/know which materials will work best for the project</li> <li>describe the reasons for their choices</li> <li>use selected materials correctly - in the right place, in the right way</li> <li>demonstrate safe practice when using selected materials</li> </ul> | <ul style="list-style-type: none"> <li>discussions with teacher and team/classmates</li> <li>internet research</li> <li>phone calls or emails to merchants or suppliers</li> <li>understanding of budget as it relates to choice of materials</li> <li>applying knowledge learned about materials selected throughout project</li> <li>following manufacturers' safety specifications and safety data sheets when using materials</li> </ul> | <ul style="list-style-type: none"> <li>discussions with employer and co-workers</li> <li>internet research</li> <li>phone calls or emails to merchants or suppliers</li> <li>understanding of environment as it relates to choice of materials</li> <li>understanding of client's preferences and budget</li> <li>applying knowledge learned about materials selected throughout project</li> <li>explaining why choices were made</li> <li>following manufacturer's safety specifications and safety data sheets when using materials</li> </ul> | <ul style="list-style-type: none"> <li>Student work diary</li> <li>Project documentation</li> <li>Assessment record sheet</li> </ul> |

More information in:

- BCITO's Level 3 BCATS **Materials Handbook**
- Suppliers and their websites
- Manufacturers' specifications and websites
- Safety Data Sheets

**Note:** The assessment against this unit standard must include a minimum of four different material types.



# DOCUMENTATION

## Unit Standard 29679 (8 credits)

| Official compliance component  |  |
|--|--|
| Title  | Outcomes   |
| <b>Develop and use BCATS project documentation for a Stage 3 BCATS project</b> | <b>1. Develop and use BCATS project documentation for a Stage 3 BCATS project</b>  |
|  | 1.1 Stages of the job are identified and BCATS project documentation is developed in accordance with project requirements and workplace practice.                              |
|  | 1.2 BCATS project documentation is used to decide the materials, equipment, and machinery required for the Stage 3 BCATS project.  |
|  | 1.3 Information is stored, retrieved, and reported in accordance with workplace practice.  |
|  | 1.4 Quality control procedures to be used during production are identified in accordance with project requirements and workplace practice.                                     |
|  | 1.5 BCATS project documentation is updated as required throughout the project to reflect any changes needed to continue to meet the requirements of the Stage 3 BCATS project. |

| Practical assessment component  |   |   |  |
|---|---|---|--|
| Expects students to:  | Looks like:<br>In a <b>classroom</b> setting  | Looks like:<br>In a <b>workplace</b> setting  | Recorded on/in:  |
| <ul style="list-style-type: none"> <li>be able to identify the different stages of the project</li> <li>develop project documentation</li> <li>keep an ongoing current record of the project including:               <ul style="list-style-type: none"> <li>collecting and collating all relevant documents (product information, data sheets, SSSP etc)</li> <li>updating brief, plans, specs, budget, as the project progresses</li> </ul> </li> <li>explain and justify the choices or changes they have made (or choices/changes that were made if on work placement) when selecting tools, materials, equipment or machinery</li> <li>be able to locate and share documents and records as and when required</li> <li>record the quality checks carried out at each stage of the project</li> </ul> | <ul style="list-style-type: none"> <li>project documentation is developed from scratch or existing documentation is amended in a way that adds to the project in a meaningful and useful way</li> <li>materials, equipment, and machinery used are specified in project documentation</li> <li>all documentation is well presented and easily accessible</li> <li>quality control procedures, and how they relate to the project, are understood</li> <li>documentation is up to date and any changes have been noted as part of the project paperwork</li> <li>'paper work' is integrated into the project</li> <li>documentation that is robust and detailed enough that it could be used by others to replicate the project</li> </ul> | <ul style="list-style-type: none"> <li>project documentation is used</li> <li>discussions occur with employer and co-workers</li> <li>project documentation is developed which relates to the student's role in the workplace</li> <li>materials, equipment, and machinery used are specified in project documentation</li> <li>all documentation is well presented and easily accessible</li> <li>understanding of quality control procedures and how they relate to the project is demonstrated</li> <li>documentation is up to date and any changes have been noted as part of the project paperwork</li> <li>'paper work' is integrated into the project</li> </ul> | <ul style="list-style-type: none"> <li>Student work diary</li> <li>Project documentation</li> <li>A Risk Hazard control register</li> <li>Assessment record sheet</li> </ul> |

More information in:

- BCITO's Level 3 BCATS **Planning and Documentation Handbook**
- The internet or library

# COMMUNICATE AND COLLABORATE

## Unit Standard 29680 (5 credits)

| Official compliance component  |  |
|--|--|
| Title  | Outcomes   |
| <b>Communicate and work collaboratively in a Stage 3 BCATS project</b> | 1. Communicate and work collaboratively in a Stage 3 BCATS project   |
|  | 1.1 The parties involved in the Stage 3 BCATS project are described in terms of their roles and relationships.                         |
|  | 1.2 Information relating to the BCATS project is received and passed on clearly, accurately and in accordance with workplace practice. |
|  | 1.3 Information is exchanged that is relevant to the situation, occasion and the relationship between the participants.                |
|  | 1.4 Questions are used to obtain and clarify information from other parties when needed.   |
|  | 1.5 Communication style that contributes to an effective team environment is demonstrated.   |
|  | 1.6 Negotiation techniques are used when necessary to ensure the Stage 3 BCATS project is undertaken successfully.                     |

| Practical assessment component   |   |  |   |
|--|---|--|---|
| Expects students to:   | Looks like:<br>In a <b>classroom</b> setting  | Looks like:<br>In a <b>workplace</b> setting   | Recorded on/in:   |
| <ul style="list-style-type: none"> <li>understand roles of, and relationships between, everyone involved in the project</li> <li>take information presented and share relevant details with the right people in the right way</li> <li>communicate effectively and appropriately to the various people involved in the project</li> <li>use correct questioning techniques to achieve desired outcome</li> <li>use negotiation techniques effectively</li> </ul> | <ul style="list-style-type: none"> <li>being able to describe who people are, what their role is, and what their relationship is to the student</li> <li>clear understanding of how to comprehend and then share information, instructions or directives</li> <li>respectful conversations are had – negotiation rather than argument</li> <li>all skills and techniques are used in the right way – including written, verbal and body language – showing an understanding of correct tone and manner, and using them at the right time</li> <li>determining when to ask a question – not leave it too late</li> <li>asking questions of the right person</li> <li>confidently asking questions and applying the response in correct way</li> <li>when necessary and appropriate, using negotiation techniques successfully</li> </ul> | <ul style="list-style-type: none"> <li>being able to describe who people are, what their role is, and what their relationship is to the student</li> <li>following instructions and sharing knowledge when requested</li> <li>being respectful and behaving in the right way</li> <li>being engaged and aware of appropriate behaviour in the workplace</li> <li>showing confidence to ask questions</li> <li>asking pertinent questions using correct techniques</li> <li>actively listening to responses and applying them right way</li> <li>when necessary and appropriate, using negotiation techniques successfully</li> </ul> | <ul style="list-style-type: none"> <li>Student work diary (verified by assessor/ employer)</li> <li>Assessment task</li> <li>Assessment record sheet</li> </ul> |

More information in:

- BCITO's Level 3 BCATS **Communications Handbook**

**Note:** The above unit standard must be achieved throughout the project, from concept to conclusion.

# MEASURE AND CALCULATE

## Unit Standard 29681 (3 credits)

| Official compliance component                            |  |
|--|--|
| Title  | Outcomes   |
| <b>Measure and calculate for a Stage 3 BCATS project</b> | 1. In accordance with in workplace practice measure and calculate for a Stage 3 BCATS project  |
|  | 1.1 Required measurements and calculations are determined.   |
|  | 1.2 Mathematical methods that are chosen are appropriate for the required measurements and calculations.                             |
|  | 1.3 Chosen methods are applied in the context of the situations provided.  |
|  | 1.4 Measurements and calculations are undertaken and are accurate and consistent with the requirements of the Stage 3 BCATS project. |
|  | 1.5 Information and results are accurately presented.  |

| Practical assessment component   |  |  |  |
|--|--|--|--|
| Expects students to:   | Looks like:<br>In a <b>classroom</b> setting   | Looks like:<br>In a <b>workplace</b> setting   | Recorded on/in:  |
| <ul style="list-style-type: none"> <li>use correct mathematical methods to measure quantities and materials</li> <li>use correct tools to determine how and what to measure or calculate</li> <li>use correct mathematical technique/calculations to determine quantity or size required</li> <li>choose methods which are relevant and appropriate to the project and the environment</li> <li>give the right answer when asked correctly and consistently</li> </ul> | <ul style="list-style-type: none"> <li>measure twice cut once!</li> <li>internet research to find online or manufacturers' calculators</li> <li>understanding why methods are chosen as well as how to do it</li> <li>understanding concept of wastage and how it applies when calculating quantities</li> <li>knowing correct measurement units and how they relate to different materials and products</li> <li>where relevant, reading any packaging and product information, and using according to instructions</li> <li>measurements and calculations are updated, if altered, in project documentation</li> </ul> | <ul style="list-style-type: none"> <li>measure twice cut once!</li> <li>fulfilling requests to measure quantities, lengths, volumes, etc</li> <li>knowing which terms relate to which products or materials</li> <li>being able to share/show apps or technology which assist calculations</li> <li>knowing correct measurement units and how they relate to different materials and products</li> <li>understanding concept or wastage and how it applies when calculating quantities</li> <li>where relevant, reading all packaging and product information and using according to instructions</li> </ul> | <ul style="list-style-type: none"> <li>Student work diary</li> <li>Project documentation</li> <li>Assessment record sheet</li> </ul> |

More information in:

- BCITO's Level 3 BCATS **Building and Construction Mathematics Handbook**

# TOOLS, MACHINERY AND EQUIPMENT

## Unit Standard 29682 (4 credits)

| Official compliance component   |  |
|---|--|
| Title   | Outcomes   |
| <b>Select, use, and maintain tools, equipment and machinery for a Stage 3 BCATS project</b> | <b>1. Select, safely use, and maintain tools and equipment for a Stage 3 BCATS project</b>   |
|   | 1.1 Tools and equipment required for a Stage 3 BCATS project are selected in accordance with the BCATS project documentation, specifications and workplace practice. |
|   | 1.2 Selected tools and equipment are inspected and used safely, in accordance with specifications and workplace practice.  |
|   | 1.3 Selected tools and equipment are maintained in accordance with specifications and workplace practice.  |
|   | 1.4 Tools and equipment are cleaned and cleared after use, in accordance with workplace practice.  |
|   | <b>2. Select, set up, safely operate and maintain machinery for a Stage 3 BCATS project</b>  |
|   | 2.1 Machinery required for a Stage 3 BCATS project is selected in accordance with the BCATS documentation, specifications and workplace practice.                    |
|   | 2.2 Selected machinery is set up in accordance with specifications and workplace practice.   |
|   | 2.3 Selected machinery is operated in accordance with specifications and workplace practice.   |
|   | 2.4 Machinery and work area are cleaned and cleared after use, in accordance with workplace practice.  |
|   | 2.5 Machinery is maintained in accordance with specifications and workplace practice.  |

| Practical assessment component   |   |  |   |
|--|---|--|---|
| Expects students to:   | Looks like:<br>In a <b>classroom</b> setting  | Looks like:<br>In a <b>workplace</b> setting   | Recorded on/in:   |
| <ul style="list-style-type: none"> <li>know which tool, equipment, and/or machinery to choose for a specific task</li> <li>safely use</li> <li>maintain and look after tools and equipment</li> <li>demonstrate understanding of tool and equipment maintenance</li> <li>carry out tool and equipment maintenance</li> </ul> | <ul style="list-style-type: none"> <li>researching which tools, equipment, and machinery will be required for each stage of the project</li> <li>using project plans and specifications to choose correct tools, equipment, and machinery</li> <li>reading or watching user manual</li> <li>using unfamiliar tools, equipment, or machinery only after proper training</li> <li>watching and/or asking for advice to clarify correct usage</li> <li>using tools and equipment safely and discussing the effects of not doing so</li> <li>cleaning and putting away tools and equipment after use</li> </ul> | <ul style="list-style-type: none"> <li>using project documentation, where available, to choose correct tools, equipment, and machinery</li> <li>using unfamiliar tools, equipment, or machinery only after proper training</li> <li>watching and/or asking for advice to clarify correct usage</li> <li>using tools and equipment safely and discussing the effects of not doing so</li> <li>cleaning and storing tools, equipment, and machinery after use</li> </ul> | <ul style="list-style-type: none"> <li>Student work diary</li> <li>Project documentation</li> <li>Assessment record sheet.</li> <li>Photographs demonstrating safe and correct usage</li> </ul> |

More information in:

- BCITO's Level 3 BCATS **Tools, Machinery and Equipment Handbook**

# OTHER TRADES

## Unit Standard 29683 (2 credits)

| Official compliance component  |   |
|--|---|
| Title  | Outcomes  |
| <b>Incorporate other building, construction and allied trades into a Stage 3 BCATS project schedule</b>  | <b>1. Identify the contributions and impacts of other trades on a Stage 3 BCATS project</b>   |
|  | 1.1 The reasons for incorporating other trades' requirements into a project schedule are explained.   |
|  | 1.2 Other trades relevant to a specific Stage 3 BCATS project are identified from BCATS project documentation.  |
|  | 1.3 Other trades' requirements, limitations, and inter-relationships are described in terms of the implications for the project schedule.             |
|  | 1.4 Other trades' production and/or construction processes are described in terms of their contributions to, and impacts on, a Stage 3 BCATS project. |
| <b>2. Incorporate the work of other trades in planning and scheduling the work required to complete a Stage 3 BCATS project.</b>   |   |
| 2.1 The requirements and limitations of identified trades are incorporated in the Stage 3 BCATS project schedule, in accordance with BCATS project documentation and workplace practice. |   |

| Practical assessment component   |  |  |   |
|--|--|--|---|
| Expects students to:   | Looks like:<br>In a <b>classroom</b> setting   | Looks like:<br>In a <b>workplace</b> setting   | Recorded on/in:   |
| <ul style="list-style-type: none"> <li>use project documentation to identify what other trades need to be involved with the project and why</li> <li>know what they need to do on their project both before and after the work of other trades</li> <li>identify any risks associated with working with other trades</li> <li>incorporate at least two other trades into the project schedule</li> </ul> | <ul style="list-style-type: none"> <li>establishing what other trades are required to complete project</li> <li>establishing when other trades' input is required</li> <li>being able to outline what is required from other trades, and when</li> <li>understanding and documenting contributions and risks to quality, budget, delivery and outcome</li> </ul> | <ul style="list-style-type: none"> <li>understanding what and when other trades are involved in project</li> <li>understanding what jobs they do and role they play</li> <li>understanding risks to quality, budget, delivery and outcome in the event of a communication breakdown with other trades</li> </ul> | <ul style="list-style-type: none"> <li>Student work diary</li> <li>Project schedule and other relevant project documentation</li> <li>Assessment record sheet</li> <li>Assessment task</li> </ul> |

More information in:

- BCITO's Level 3 BCATS **Communications Handbook**
- BCITO's Level 3 BCATS **Planning and Documentation Handbook**

# UNDERTAKE A BCATS\* PROJECT

\*Level 3

## Unit Standard 29684 (12 credits)

| Official compliance component   |   |
|---|---|
| Title   | Outcomes  |
| <b>Incorporate other building, construction and allied trades into a Stage 3 BCATS project schedule</b>   | <b>1. Prepare to undertake a Stage 3 BCATS project</b>  |
|   | 1.1 Material and equipment requirements are identified from BCATS project documentation.  |
|   | 1.2 Work area and required materials, tools, equipment and machinery are set up to meet the project requirements in accordance with BCATS project documentation and workplace practice. |
|   | <b>2. Undertake a Stage 3 BCATS project</b>   |
|   | 2.1 Materials, tools, equipment and machinery are used to meet the project requirements in accordance with BCATS project documentation and workplace practice.                          |
|   | 2.2 Each stage of the production process is undertaken in accordance with BCATS project documentation.  |
|   | 2.3 Any amendments to the project are recorded in project documentation in accordance with workplace practice.  |
|   | 2.4 Identified quality control procedures are implemented during the production process in accordance with workplace practice.  |
|   | <b>3. Compare a Stage 3 BCATS project against project requirements</b>  |
|   | 3.1 Project outcome is checked and measured against project requirements.   |
| 3.2 Any variances between the project outcome and the project requirements are identified.  |   |
| 3.3 Any remedial actions required are identified.   |   |
| Practical assessment component  |   |
| Expects students to:  | Recorded on/in:   |
| <ul style="list-style-type: none"> <li>Prepare for and undertake a project of sufficient complexity, under general supervision, and to compare the final outcomes against the original requirements.</li> </ul> | <ul style="list-style-type: none"> <li>Student work diary</li> <li>Project documentation</li> <li>Assessment record sheet</li> <li>Photos of each stage of the project</li> </ul>       |

You can find out more in:

- BCITO's Assessment Guidelines for Level 3 BCATS Unit Standards





**v1.5**  
**Jan 2023**