

BIMcreds[®]

Information Sheet

Overview

Building Information Modelling (BIM) and Digital Engineering (DE) are common terms used in the construction and infrastructure sector. However, being a BIM/DE practitioner requires key skills and comprehensive knowledge of the principles and concepts involved.

buildingSMART Australasia (bSA) has partnered with experts in the BIM field to develop a robust methodology to assess the knowledge of practitioners, then provide recognition of that expertise (in the form of a Certificate of Completion). The assessment platform is called BIMcreds and it is a pragmatic, practical approach to identify those who know what they are talking about when it comes to BIM and its application to their profession. The assessments fit with the APCC/ACIF BIM Knowledge and Skills Framework (Framework) and are designed for individual practitioners (not groups or organisations). It is expected that the results will be used by individual BIM practitioners to:

- Generate proof of expert knowledge (a Certificate of Completion).
- Gain CPD (Continuing Professional Development) points with professional organisations.
- Strengthen their resume.
- Pinpoint areas of practice needed to sharpen their skills.

Organisations that employ individuals who have passed BIMcreds assessments will be able to leverage the resumes of these people to strengthen their own organisational capabilities and credentials.

BIMcreds Practitioner Assessment

- Practitioners can purchase a BIMcreds Assessment valued at \$100 (includes two [2] free attempts only).
- Further attempts or other assessments cost \$100.00 (excl GST).
- The BIM Fundamentals assessment contains:
 - 60 minutes allocated assessment completion time.
 - 50 multiple choice and true/false questions.
 - Requires 80% pass to attain a Certificate of Completion.
- BIMcreds is NOT part of a learning regime. That is, it cannot be used to 'learn' BIM knowledge if that expertise is lacking in the candidate. The assessment simply assesses the existing knowledge of a practitioner at the particular time that they undertake the test. Failure to attain an 80% or higher pass mark is a strong indication that the practitioner should consider undertaking appropriate training in the areas of the test they have underperformed in, before re-sitting the assessment.

- Assessment costs are non-refundable (this includes instances of partial completion of assessment and lapsed attempts beyond six months of initial platform login).

BIMcreds Probity Rules

Failure to adhere to the following rules WILL disqualify the candidate from further assessment attempts. If evidence of cheating on the assessment comes to light subsequently, bSA reserves the right to revoke any Certificate of Completion attained by publishing on its public website all relevant details (including name and any identifying information) of the individual/s involved in order to maintain the high integrity of the **BIMcreds** platform and the reputation of bSA itself. Should bSA be forced to take this action, no refund of assessment costs (including re-sitting attempts) will be given. Assessment via the **BIMcreds** platform:

- Must only be completed by the candidate and not by anyone else on the candidate's behalf.
- Answers must be by the candidate and not copied from other people's work in full or in part.
- Contents must not be discussed by the candidate with anyone else.

Practitioners/candidates must have read, understood and agree to be bound by these rules.

Assessment Preparation

- Prerequisites - None are required but ensure selection of an assessment that suits your Stakeholder group and organisational role as defined in the Framework.
- Make sure you allow enough uninterrupted time to complete the assessment.
- Make sure you attempt the assessment in a place with reliable internet access and an environment that allows you to concentrate and focus on the questions being asked.

Professional Association Recognition

Australian Institute of Architects (AIA)

- Continual Professional Development (CPD) points: 1 point

Australian Institute of Project Management (AIPM)

- Continual Professional Development (CPD) points: 1 point

Knowledge Tested

BIMcreds has been developed to allow practitioners to select the Stakeholder Group and roles they wish to be recognised for and assessed against. This focus was initiated within the Framework through wide consultations with industry that requested credentials for specific personnel and roles.

A successful pass (80% and over in the case of BIM Fundamentals) of the assessment will allow practitioners to download and print an official **BIMcreds** Certificate of Completion. This important credential will also assist clients in understanding the actual capabilities of the teams that are bidding for projects.

Stakeholder Groups

The framework uses Stakeholder Groups to understand the roles within the construction market sector. The differentiation of the groups is established as generally each project would share a similar stakeholder formation. BIMcreds currently includes the following three stakeholder groups:

- Client and Client Representatives (Owners, project Managers, etc)
- Design (Architects, Engineers, etc)
- Construction (Managers, Sub-Contractors, Tradespeople, etc)

Hierarchical Organisation of Roles

The framework uses a hierarchical structure to define how each stakeholder level interacts with the Concepts. The structure is based on the traditional business model hierarchy of Strategic, Managerial (Tactical) and Technical where:

- Strategic - is aimed at those that are in a high level within their business or project structure. They are generally external sales teams and those that are selling the business capabilities to market.
- Managerial - is the tactical level which drives projects, project teams and discipline teams. They generally create a project management plan and are responsible for the project running on time and within budget.
- Technical these people define and manage the technical needs of projects, ranging from IT through to application workflows etc.

Assessment Development

The operation of **BIMcreds** is intended to be self-funding. It is also required to be affordable, in order to encourage as many BIM/DE practitioners as possible to seek professional recognition. The result is that **BIMcreds** relies on the willingness of volunteers to develop assessment questions and curate the Framework. This is a huge undertaking, requiring a high level of skill and expertise, and some volunteers have been involved since well before 2013.

Assessment development begins at least 6 months ahead of the assessment launch date. A team of assessment developers are recruited and working to very strict timelines and confidentiality requirements, they draft questions and answers for each section of the assessment. When complete the draft assessment is then exposed to a peer review by experienced and highly qualified experts to ensure that it:

- Is a fair and adequate assessment of the relevant skills.
- Involves a similar degree of difficulty to real-world circumstances.
- Is achievable within the time allowed for completing the assessment.

The Role of buildingSMART Australasia (bSA)

buildingSMART provides the worldwide chapter network, plus the necessary technical and process support, to develop open standards that support information workflows.

buildingSMART Australasia (bSA) is the body tasked with driving the uptake of BIM and digital engineering in Australia and New Zealand. bSA is a chapter of buildingSMART International and as such is able to bring considerable international experience to bear in support of the adoption of digital construction technologies.

bSA's mission is to work with key industry and government leaders to develop, maintain and facilitate the use of open BIM standards, collaborative processes and integrated practices. We are committed to ensuring the improved exchange of information between software applications used in the construction and infrastructure industries in Australia and New Zealand. bSA's objectives are to:

- Improve the policy and regulatory environment for the adoption of common specifications for sharing construction data.
- Facilitate the sourcing of practical information to the industry about common specifications for sharing data.
- Publish common specifications for sharing data to create synergy among the languages of the building and construction industries leading to interoperability of the industry's information systems.
- Help integrate the industry into the global electronic market and improve productivity of the design, construction and operation process in Australasia.

bSA works to fulfil these objectives by gathering and supplying practical and current industry information on behalf of bSA stakeholders and other organisations and companies that follow bSA through various means. This industry-wide approach to responding to technology, policy and regulatory issues, helps to ensure that Governments are informed of potential opportunities in the building industry and are provided with appropriate industry-considered recommendations.

bSA Corporate Members include:

Platinum Supporter

Australian Department of Defence, Infrastructure Asset Development Branch

Gold Supporter

CIMIC Group (EIC Activities)

Silver Supporters

Laing O'Rourke Australia

John Holland

BIM Consulting

Investa Office Management

Master Builders Queensland

Lend Lease Building

bSI International Supporters

Autodesk Australia

Arup

Corporate Supporters

Masterspec - Construction Information

Norman Disney & Young

BRANZ

Architectus

Hansen Yuncken

Exactal Technologies

Aconex

Architekton

Mitchell Brandtman

Information Quality

12D Solutions

New Zealand Transport Agency

Academic Supporter

University of South Australia