

#### FACTSHEET ON PROFESSIONAL CONVERSION PROGRAMME FOR BUILDING INFORMATION MODELLING (BIM) PROFESSIONALS

# (A) WHAT IS PROFESSIONAL CONVERSION PROGRAMME (PCP) FOR BIM PROFESSIONALS?

The Professional Conversion Programme (PCP) for Building Information Modelling (BIM) Professionals is a 6 or 12 month Place-and-Train programme. The programme aims to train mid-career individuals and equip them with the knowledge and skills to embark on a career in the built environment sector as BIM professionals.

2. Participants will undergo up to 12 months training, comprising a blend of parttime classroom training at BCA Academy as well as on-the-job training provided by the PCP employer. Participants with relevant built environment experience or qualifications<sup>1</sup> will undergo an accelerated 6-month training programme. An overview of the PCP for BIM Professionals can be found in <u>Annex A</u>.

|   | Training Duration |          |
|---|-------------------|----------|
| PCP Training Components   | 12 months         | 6 months |
| Facilitated Classroom Learning (BCA Academy)  | 370hrs            | 232hrs   |
| 1. Part-Time Foundation Module under Specialist<br>Diploma for Construction Management  | 138hrs            | N.A.     |
| 2. Certification Course on BIM Management   | 32hrs             | 32hrs    |
| <ol> <li>Certification Course on BIM Modelling<br/>(Architecture / Mechanical, Electrical &amp; Plumbing /<br/>Structure tracks)</li> </ol> | 32hrs             | 32hrs    |
| 4. Part-Time Specialist Diploma in BIM  | 168hrs            | 168hrs   |
| On-the-Job Training (By Company)  | 2,016hrs          | 976hrs   |
| Total PCP Training Duration   | 2,386hrs          | 1,208hrs |

<sup>&</sup>lt;sup>1</sup> Built Environment-related areas include Architecture, Civil Engineering, Mechanical & Electrical Engineering, Facilities Management, etc.



#### (B) WHO IS ELIGIBLE TO PARTICIPATE IN PCP FOR BIM PROFESSIONALS?

3. Interested individuals can apply for the PCP for BIM Professionals if they meet the following criteria:

- A Singapore Citizen or Singapore Permanent Resident
- Possess at least two years of working experience
- Not in a similar job role prior to joining the PCP
- Hold minimum Diploma and above qualifications, preferably in Built Environment-related areas

# (C) WHAT DOES THE JOB ENTAIL AND WHAT KINDS OF CAREER OPPORUNITIES CAN INDIVIDUALS LOOK FORWARD TO?

4. As the built environment industry moves rapidly into BIM, there are many more opportunities for individuals to take on BIM roles. BIM modellers and specialists will begin with creating and managing BIM models, and performing model checks and audits. They will also collaborate with stakeholders to implement BIM in the entire construction process, and conduct building simulation to detect and resolve potential building issues. Participants under the PCP for BIM professionals may aspire to become BIM managers and directors, coordinating multiple BIM projects and leading the organisation's overall BIM strategies. An overview of the career progression pathway for BIM professionals and their job scopes can be found in <u>Annex B</u>.

### (D) WHAT KIND OF FUNDING SUPPORT IS AVAILABLE?

5. Course Fees and Salary under the PCP are fully funded by Workforce Singapore (WSG) and PCP employer. No fees will be incurred by participants.

#### (E) HOW CAN INDIVIDUALS APPLY FOR PCP FOR BIM PROFESSIONALS?

6. There will be 2 intakes per year in Jul/Aug and Mar/Apr. Interested individuals can contact the Building and Construction Authority (BCA) directly through:

- Phone: 6730 4420
- Email: BCA\_Enquiry\_Manpower@bca.gov.sg



#### Annex A

# **Professional Conversion Programme for BIM Professionals**

6 OR 12 MONTH PLACE-AND-TRAIN



## Mid-Career PMET Entrant

- Type 1: Locals from other sectors without BE qualifications
- **Type 2:** Existing workers in BE sector with experience in construction processes

| Type 1<br>(370 hours over 12 months)                                      | Type 2<br>(232 hours over 6 months) |  |
|---|-------------------------------------|--|
| -month part-time Construction<br>Management Course<br>(Foundation Module) | -                                   |  |
| 4-day Certification Cour  | se on BIM Management                |  |

#### B. Structured OJT by Employer

May include the following components:

- BIM Project Setup
  - Environmental Analysis, Virtual Building Components, Load Calculations, Materials Usage Calculations, BIM Workflows & Standards
- BIM Modelling
  - Isometric Projection, Model Visualisation, Tender & Site Drawing Interpretation, As-Built Drawing Updates
- BIM Building Simulation & Coordination
  - Construction Scheduling, Building Process Simulation, Clash Detection & Reporting, Conflict Resolution
- BIM Audit, Regulation and Compliance
  - Model Audit, Site Survey & Inspection, Model Compliance



## Job-Ready BIM Professional

Salary: \$2,800 to \$4,400

#### Job Description:

- Interpret, create and edit models in BIM software independently
- Prepare information generated from BIM software
- Customize and prepare a BIM Execution Plan, and implement the commitments
- Perform audit check of models to identify discrepancies
- Assist BIM Manager and team to manage BIM processes within organization and within projects



#### Annex B

# **Career Progression Pathways for BIM Professionals**

Salary Range: \$3,000 to \$4,000

**Salary Range:** \$2,500 to \$3,000

#### **BIM MODELLER**

- Creating and manage
   BIM models
- Liaise with other project parties to resolve discrepancies and problems through BIM

### **BIM SPECIALIST**

• Implement BIM to meet for (e.g. environmental analysis, 4D and 5D simulation)

- Collaborate with stakeholders to implement BIM Execution Plans
- In-depth technical knowledge in BIM / VDC technologies and workflows, including performing model audit

# **Salary Range:** \$3,900 to \$6,000

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#### **BIM MANAGER**

- Perform project and team-level BIM strategy implementations and executive BIM processes
- Manage multidisciplinary BIM
   teams
- Oversee, coordinate and manage BIM projects

 Provide internal BIM consultancy for projects

 Determine conventions for reviewing BIM models and associated deliverables

#### Salary Range: \$6,000 onwards

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#### **BIM DIRECTOR**

- Formulate and execute firmlevel BIM strategies for longterm outcomes
- Work with project managers to optimize schedules
- Manage BIM project benchmarks to meet project deadlines
- Lead design coordination meetings
- Carry out research and development with new and existing technologies to embark on innovative building processes