





### BSc (Hons) Construction and the Built Environment Graduate Apprenticeship(GA): Architectural Technology Pathway



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**Associate Professor & Programme Leader of Architectural Technology** 

SFHEA, FCIAT, C. Build E FCABE, RIBA Affiliate, PhD, MSc, BSc (Hons.) Arch. Eng.

**Chartered Architectural Technologist & Chartered Building Engineer** 

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- Graduate Apprenticeships provide a "workplace learning experience", offering the opportunity to work in partnership with industry as employers.
- The programme offers 4 pathways to the BSc (Honours) in Construction and Built Environment (GA). These are:
  - Architectural Technology
  - Building Surveying
  - Real Estate Surveying
  - Quantity Surveying



# Professional body accreditation:

The Surveying pathways are accredited by the Royal Institution of

Chartered Surveyors (RICS)

The Architectural Technology pathway is accredited by the Chartered

Institute of Architectural Technologists (CIAT)

We have CIAT Centre of Excellence status









# Mode of delivery:

- This Graduate Apprenticeship course delivers the knowledge required through University block release teaching of two weeks over three trimesters of each academic year.
- The employer mentors the Graduate Apprentices when situated back in the office and tutor them as workplace learners
- After four years, the successful apprentice will graduate with an Honours degree: BSc (Honours) Construction and Built Environment Graduate Apprenticeship (Architectural Technology Pathway)

### Architectural Technology Pathway modules:



Level		Trime	ester 1		Trime	ster 2		Trimester 3		
	Module number	BSV07406	BSV07400		BSV07407	BSV07401		BSV07402	BSV07408	
7	Module title	Building Modelling 1 (GA)	Building Design and Technology 1 (GA)		Architectural Detailing (GA)	Building Design and Technology 2 (GA)		Construction and Property Law (GA)	Architectural Technology 1 (GA)	
	Module number	BSV08412	BSV08413		BSV08414	BSV08415		BSV08416	BSV08417	
8	Module title	Design & Building Standards 1 (GA)	Design & Building Standards 2 (GA)		Architectural Technology 2 (GA)	Building Modelling 2 (GA)		Design for Manufacturing (GA)	Building Adaptation & Conversion (GA)	
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	Module number	BSV09403			BSV09400	BSV09401		BSV09402		
9	Module title	Professional Standards (GA) (40 credits)			Environmental Sustainability (GA)	Health and Safety (GA)		Innovation in Construction and Buil Environment (GA) (40 credits)		
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	Module number	BSV10400			BSV10402	BSV10401				
10	Module title	Consultancy Project (GA) (40 credits)			Sustainable Development (GA)	Dissertation (Work-based) (GA) (60 credits)			GA)	

### Building Surveying Pathway modules:



Year		Trimester 1			Trimester 2			Trimester 3		
	Module number	BSV07405	BSV07400		BSV07404	BSV07401		BSV07402	BSV07403	
1	Module title	Surveying (GA)	Building Design and Technology 1 (GA)		Property Value Studies (GA)	Building Design and Technology 2 (GA)		Construction and Property Law (GA)	Construction Cost Studies 1 (GA)	
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	Module number	BSV08402	BSV08403		BSV08400	BSV08406		BSV08401	BSV08404	
2	Module title	Construction Cost Studies 2 (GA)	Construction Financial Management (GA)		Building Surveying 1 (GA)	Facilities Management (GA)		Building Surveying 2 (GA)	Contract Administration (GA)	
	Module number	BSV09403			BSV09400	BSV09401		BSV09402		
3	Module title	Professional Standards (GA) (40 credits)			Environmental Sustainability (GA)	Health and Safety (GA)		Innovation in Construction and Built Environment (GA) (40 credits)		
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	Module number	BSV10400			BSV10402	BSV10401				
4	Module title	Consultancy Project (GA) (40 credits)			Sustainable Development (GA)	Dissertation (Work-based) (GA) (60 credits)			GA)	

### Quantity Surveying Pathway modules:



Year		Trimester 1			Trimester 2			Trimester 3		
	Module number	BSV07405	BSV07400		BSV07404	BSV07401		BSV07402	BSV07403	
1	Module title	Surveying (GA)	Building Design and Technology 1 (GA)		Property Value Studies (GA)	Building Design and Technology 2 (GA)		Construction and Property Law (GA)	Construction Cost Studies 1 (GA)	
	Module									
	number	BSV08402	BSV08403		BSV08408	BSV08406		BSV08409	BSV08404	
2	Module title	Construction Cost Studies 2 (GA)	Construction Financial Management (GA)		Quantity Surveying 1 (GA)	Facilities Management (GA)		Quantity Surveying 2 (GA)	Contract Administration (GA)	
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	Module number	BSV09403		BSV09400	BSV09401		BSV09402			
3	Module title	Professional Standards (GA) (40 credits)			Environmental Sustainability (GA)	Health and Safety (GA)		Innovation in Construction and Built Environment (GA) (40 credits)		
	Module number	BSV10400			BSV10402	BSV10401				
4	Module title	Consultancy Project (GA) (40 credits)		Sustainable Development (GA)	Dissertation (Work-based) (GA) (60 credits)			GA)		

### Real Estate Pathway modules:



Year		Trimester 1			Trimester 2			Trimester 3		
	Module number	BSV07405	BSV07400		BSV07404	BSV07401		BSV07402	BSV07403	
1	Module title	Surveying (GA)	Building Design and Technology 1 (GA)		Property Value Studies (GA)	Building Design and Technology 2 (GA)		Construction and Property Law (GA)	Construction Cost Studies 1 (GA)	
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	Module number	BSV08402	BSV08403		BSV08410	BSV08406		BSV08411	BSV08407	
2	Module title	Construction Cost Studies 2 (GA)	Construction Financial Management (GA)		Real Estate Surveying 1 (GA)	Facilities Management (GA)		Real Estate Surveying 2 (GA)	Planning Law and Development Control (GA)	
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	Module number	BSV09403			BSV09400	BSV09401		BSV09402		
3	Module title	Professional Standards (GA) (40 credits)			Environmental Sustainability (GA)	Health and Safety (GA)		Innovation in Construction and Bui Environment (GA) (40 credits)		
	Module number	BSV10400			BSV10402	BSV10401				
4	Module title	Consultancy Project (GA) (40 credits)			Sustainable Development (GA)	Dissertation (Work-based) (GA) (60 credits)			GA)	





# Employer's role:

employers are expected to:

allow apprentices to attend the block-based teaching and engage in the (formative and summative) assessment;

be guided by SEBE in terms of:

- what employer mentoring and workplace tutoring should be conducted in order for apprentices to acquire core and specific knowledge and understanding of the principle applications
- how to source knowledge and understanding of the principle applications from the employer mentoring and workplace tutoring and subject this to formative assessment



# Employer mentoring, workplace tutoring and learning (level 7):

### Standard Module 200 hrs:

- 50 hours block-release, online tutoring and work visits
- 150 hours for supervised independent learning (SIL)
- 10 hours /week (SIL)
- 2 hours per day in the evenings,
- weekends,
- 1.5 working days (1 day for SIL and 0.5 days for employer mentoring).





### E-mail:

Matriculated student of the University will be allocated a University email account.

This is the only recognised account for emailing Programme Team, School Support Team or the University's support services so students should check this email account on a regular basis.

The University email account is <u>also linked to Moodle</u>, our online learning environment. This means that <u>any notifications</u> from Moodle are directly sent to the student email account.



## Available to all students:



- Library (electronic books are available)
- Computer labs (when on campus)
- Free laptop loan
- BCIS (AppsAnywhere)
- VLE Moodle
- Virtual Desktop
- Module material
- Module Leaders!

# **University Regulations:**

- Extenuating circumstances
- 'Not Fit-to-Sit'
- Coursework extensions
- SSLC/Student representation
- Mentor visits
- Attendance



"I DO have a note from my doctor, but nobody can read it!"

### **BSV08415 Building Modelling 2**



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	Monday 6 December	Tuesday 7 December	Wednesday 8 December	Thursday 9 December	Friday 10 December	
AM	09.30 -10.30 Session 1: Introduction to the Module and Coursework Tasks Facilitated by Dr Suha Jaradat  10.30-11.00 Coffee Break  11.00 -12.00 Session 2: BIM & Data File Management Facilitated by Tosin Adewale	09.30-12.00 including coffee break  Session 4: Live Guest Lecture from a Chartered Architectural Technologist:  Gavin McAuley MCIAT McAuley Architecture Ltd	9.30-11.00 Session 6: Coursework 1 Tutorial (Presentation skills) Facilitated by Dr Suha Jaradat  11.00-11.30 Coffee Break  11.30-12.00 Session 7: Discussion of Readings from Mon and Tue Facilitated by Dr Suha Jaradat	09.30-11.00 Self-directed study: Work on Coursework 1  11.00-11:30 Coffee Break  11.30-12.00 Self-directed study: Work on Coursework 1	09.30-12:00 including coffee break Session 10: Presentations & Reflections on the module Facilitated by Dr Suha Jaradat & Tosin Adewale	
	Lunch 12.00–13.00	Lunch 12.00–13.00	Lunch 12.00–13.00	Lunch 12.00–13.00	Lunch 12.00–13.00	
PM	13.00–14.30 Session 3: Revit Tutorial Facilitated by Tosin Adewale  14.30-15.00 Coffee Break  15.00-17.00 Self-directed study:  Recorded Guest Lecture (1) BIM & the collaborative process between project professionals Guest lecturer: Andrew Waring-Holmes Miller  Read 'NBS BIM Report 2019 & 2020' + 'BIM and the Small Construction Firm: A Critical Perspective'	13.00-14.30 Session 5: Revit Tutorial Facilitated by Tosin Adewale  14.30-15.00 Coffee Break  15.00-17.00 Self-directed study: Recorded Guest Lecture 2: BIM in Historic Environment Scotland: Strategic Overview Guest lecturer: Eamon Gilson (Head of BIM) Read 'Professionalism in digitally mediated project work' + 'Assessing the Implementation of BIM – an Information Systems Approach'	13.00–14.30 Session 8: Revit Tutorial Facilitated by Tosin Adewale  14.30-15.00 Coffee Break  15.00-17.00 Self-directed study: Work on Coursework 1	13.00–14.30 Session 9: Revit Tutorial Facilitated by Tosin Adewale  14.30-15.00 Coffee Break  15.00-17.00 Self-directed study: Work on Coursework 1	13.30-15.00 Self-directed study: Work on Coursework 2  15.00-15.30 Coffee Break  15.30-17.00 Self-directed study: Work on Coursework 2	

- Architectural Technology
   (AT) Design Studio &
   Trimble computer labs
- 2. AT@ENU Society
- 3. Guest professionals from industry & site visits
- 4. International study trip









# Edinburgh Napier

School of Engineering & the Built Environment

# Design Studio & Trimble Technology Labs

- 3D Laser Scanning
- Drones
- Mixed Reality Technologies
- SketchUp Pro
- AutoDesk software including AutoCAD and Revit
- Digital design and offsite construction
- We have a few buildings that we've scanned with drones and lasers.









A mix of formal & informal activities including:

- Presentations by industry experts
- Visits to iconic buildings
- Exceptional access to construction sites
- Networking opportunities
- Social activities (e.g. dinner at Arabic restaurant)





















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# Thank you!

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