Master of Science (MSc) in Smart Buildings and Digital Engineering (SBDE)
Programme Structure

**Term 1**

- **Core Knowledge**
  - Building systems physics (15 credits) BENV0084
  - Engineered environmental elements (15 credits) BENV0085
  - Integrated Building Design for Health and Well-being (15 credits) BENV0055
  - Building systems modelling (15 credits) BENV0086

- **Option Modules**
  - Optional module 1 (15 credits)
  - Optional module 2 (15 credits)

- **Integrated Building Design and Operation**
  - Building systems development and operation (15 credits) BENV0087

- **Advanced Methods**
  - Integrated building systems simulation (15 credits) BENV0088

**Term 2**

- **Core Knowledge**
  - Building systems physics (15 credits) BENV0084
  - Engineered environmental elements (15 credits) BENV0085
  - Integrated Building Design for Health and Well-being (15 credits) BENV0055
  - Building systems modelling (15 credits) BENV0086

- **Option Modules**
  - Optional module 1 (15 credits)
  - Optional module 2 (15 credits)

- **Integrated Building Design and Operation**
  - Building systems development and operation (15 credits) BENV0087

- **Advanced Methods**
  - Integrated building systems simulation (15 credits) BENV0088

**Term 3**

- MSc dissertation (60 credits) BENV0089

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- Red lines connect modules which either complement each other or follow a logical progression.
- Four Study areas: Fundamentals (Green), Integrated Design and Operation (Yellow), Advanced Methods (Orange), Directed Learning (Blue).
- The structure is arranged so that lectures can be scheduled so both part-time and modular/flexible students can attend on a one day per week basis.

**Full-time Students:**
- Term 1: Day 1: BENV0084 & BENV0085
- Term 2: Day 1: BENV0087 & BENV0088

**Part-time/Modular students:** (one day per week basis)
- Term 1, Day 1: BENV0084 & BENV0085
- Term 2, Day 1: Optional Modules 1 and 2
- Term 1, Day 2: BENV0055 & BENV0086
- Term 2, Day 2: BENV0087 & BENV0088

**Modular/flexible students:** Devise a study plan in consultation with the programme director.

- Optional Modules: Students choose two from the list of seven optional modules (depending upon availability):
  - Indoor Air Quality in Buildings
  - Light, Lighting and Wellbeing in Buildings
  - Multi-Objective Design Optimisation
  - Building Acoustics
  - Post-Occupancy Evaluation
  - Low-Energy Housing Retrofit
  - Mathematical Modelling Methods for the built environment

Information correct for the 2019/20 academic year