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| <b>Module</b>              | Ergonomics and Anthropometrics         |
| <b>Course code</b>         | BAIAH-EA                               |
| <b>Credits</b>             | 5                                      |
| <b>Important notes</b>     | Available for semester abroad students |
| <b>Allocation of marks</b> | 100% Continuous assessment             |

### Module aims and objectives

The aim of the module is to enable the learner to observe, understand and appreciate Ergonomics and Anthropometrics in design of interiors.

The objectives are to gain understanding of ergonomics as applied to individual design work.

### Minimum intended module learning outcomes

On successful completion of this module, the learner will be able to:

1. Demonstrate an understanding of the role and application of ergonomics and anthropometrics in design of interiors
2. Demonstrate basic knowledge of the different elements of a building acting as an interrelated system
3. Illustrate an understanding of ergonomics and anthropometrics as applied to individual design work.

### Module content, organisation and structure

| CLASS PLAN/ MODULE CURRICULUM |          |  |
|-------------------------------|----------|--|
| Semester 1 / Week no          | Topic No | Topic Name   |
| 1.1                           | 1        | Introduction to Module and Assignments.<br>How we use the Built Environment - Ergonomics   |
| 1.2                           | 2        | The Human Body in its Environment - Introducing Ergonomics and Anthropometrics   |
| 1.3                           | 3        | Design with Ergonomics; Principles of Ergonomics   |
| 1.4                           | 4        | Design with Ergonomics; Principles of Ergonomics.  |
| 1.5                           | 5        | Design with Ergonomics; Principles of Ergonomics.  |
| 1.6                           | 6        | Assessing environments - Conducting an Ergonomic Assessment; Developing an Ergonomic Programme   |
| 1.7                           | 7        | Assessing environments - Conducting an Ergonomic Assessment; Developing an Ergonomic Programme   |
| 1.8                           | 8        | Working in the Built Environment - Preventing Ergonomically Related Injuries by Redesigning the Workplace; Fitting the workplace to the worker |

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| 1.9  | 9  | Working in the Built Environment - Preventing Ergonomically Related Injuries by Redesigning the Workplace; Fitting the workplace to the worker   |
| 1.10 | 10 | Analysing how humans and furniture relate, investigating terms such as “user-friendly” , “user-centred” and “inclusive” design. The study of anthropometric data and its use in the design process. Compliance with standards and regulations. |
| 1.11 | 11 | Analysing how humans and furniture relate, investigating terms such as “user-friendly” , “user-centred” and “inclusive” design. The study of anthropometric data and its use in the design process. Compliance with standards and regulations. |
| 1.12 | 12 | Review   |

### **Work-based learning and practice-placement**

There is no work based learning or practical placement involved in the module.

### **Module physical resource requirements**

Requirements are for a fully equipped PC lab for 60 learners. The PC lab is equipped with software to include adobe, Microsoft office, Photoshop, InDesign, Autodesk, Sketch Up and Revit, and an overhead projector. The PC lab is available to learners outside of contact teaching hours, to facilitate group assignment tasks and supports peer to peer learning.

### **Reading lists and other information resources**

#### **Recommended Reading:**

- Buxton, P. 2015. New Metric handbook planning and design data, 5<sup>th</sup> Edition, Routledge
- Pheasant, S. 2003. Bodyspace; anthropometry, ergonomics and the design work. CRC Press