# Module Guide

# Design Interactions

## ENG – 5 – 549

## School of Engineering
**Division Mechanical Engineering and Design**

Level 5

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# 1.    MODULE DETAILS

| | |
|---|---|
| **Module Title:** | Design Interactions |
| **Module Level:** | Level 5 |
| **Module Reference Number:** | ENG_5_549 |
| **Credit Value:** | 20 CATS |
| **Student Study Hours:** | 200 |
| **Contact Hours:** | 60 |
| **Private Study Hours:** | 140 |
| **Pre-requisite Learning (If applicable):** | Design Methods<br>Visual Communications<br>Inclusive Design and Usability<br>Digital Design and Modelling<br>Design for a Sustainable Society |
| **Co-requisite Modules (If applicable):** | Design Thinking and Applications<br>Design Contexts and Communications<br>Digital Visualisation and CAD<br>Design and Manufacture Project PD |
| **Course(s):** | BSc (Hons) Product Design |
| **Year and Semester** | 2019-20 Semester 2 |
| **Module Coordinator:** | Susana Soares |
| **MC Contact Details (Tel, Email, Room)** | T703<br>020 7815 7621<br>soaress@lsbu.ac.uk |
| **Teaching Team & Contact Details (If applicable):** | |
| **Subject Area:** | Engineering and Design |
| **Summary of Assessment Method:** | 100% Coursework |
| **External Examiner appointed for module:** | Richard Morris<br>Principal Lecturer, University of Brighton<br>Peter Barker<br>Head of School, Design & Communication<br>Plymouth College of Art |

# 2.    SHORT DESCRIPTION

The Design Interactions module design will be used as a catalyst for the innovation process. Projects will cover forthcoming issues that encourage students to be informed by different perspectives, people and disciplines, enabling interdisciplinary exchange of knowledge.

# 3.    AIMS OF THE MODULE

The aims of the module are:
- explore design interactions scenarios
- challenge working methods by making them interdisciplinary
- be able to create a collaboration between design and other disciplines
- start to depend design projects on observation, conversation, interpretation and translation of research into a design proposal
- use design to raise awareness and for public engagement
- introduce principles of systemic and service design

# 4.    LEARNING OUTCOMES

## 4.1 Design (D):

1.  Understand the implications and potential for the design discipline presented by interdisciplinary approaches to contemporary practice (D5i) (CTPD-A2)
2.  Develop design projects through observation, enquiry, interpretation and interaction (CTPD-B1)

3. Generate design output that provokes dialogue (CTPD-B8)

## 4.2 Engineering / Design Practice (P):

4. Understanding of and ability to use relevant materials, equipment, tools, processes and / or products (P2i) (CTPD-B2, B4)

## 4.3 Additional General Skills (GS):

5. Use different media such as online digital tools, film and video as a tool for design research and to communication unfamiliar concepts to technical and non-technical audiences (D6) (CTPD-D2, D3)
6. Successfully contribute to and / or manage a project (GS4) (CTPD-C3)

*Note: The number and letter codes in brackets with 'i' suffix eg (D1i) refer to the Institution of Engineering Designers Engineering Design Specific Learning Outcomes for EC(UK) Accredited Degree Programmes; those with 'p' suffix eg (D1p) refer to the Institution of Engineering Designers Product Design Specific Learning Outcomes for Accredited Degree Programmes*

# 5. ASSESSMENT OF THE MODULE

All assessment is based on coursework and will take place during group critiques. In order to pass the module, student must submit all assignments, and attain an overall aggregated mark of at least 40%.

| Coursework | Weighting | Hand-in dates Week beginning |
|---|---|---|
| **Citizen participation in democratic processes** You should achieve these learning outcomes: 3,5,6 | 50% | 27 February 2020 |
| **Vaccination- increasing public trust** You should achieve these learning outcomes: 1,2,4 | 50% | 26 March 2020 |

**Submissions:**
The work will be submitted digitally or/and printed (as required in the brief) in class or at the Faculty Office and via Moodle. Students are responsible to verify if the data is actually stored in any media you have used to submit the assignments. Lectures are not responsible for loss or damage of any device (such as memory sticks or external hard drives).
Please note that assignments submitted electronically (through Moodle) it is solely students' responsibility.

**Late submissions:**
A student who is unable to submit a written coursework assignment by the specified deadline may submit up to two weeks late. Coursework not submitted by the published deadline but, following notification, is submitted within two weeks (ten working days) of the published submission date will be marked by an appropriate member of staff and will have their marks capped at the pass mark 40%. Work submitted more than two weeks after the published deadline date will receive a mark of 0%.
A successful claim for extenuating circumstances may mean the capping is not applied – please check Academic Regulations at https://www.lsbu.ac.uk/about-us/policies-regulations-procedures.

**Marking scheme:**
A      70% and over    Excellent work all round
B      60% - 70%       Good work all round or a combination of excellent and acceptable work
C      50% - 60%       Acceptable work or a combination of good and below average work
D      40% - 50%       Below average work but still a pass

| E | 30% - 40% | Significantly poor work. Needs improvement to pass |
| F | below 30% | Very poor work. Shows lack of effort. Fail |
| X | 0% | No submission of work |

**Attendance:**

The school is expecting a minimum of 75% attendance in classes to achieve a grade in a module, if your attendance is below 75% without official evidence of absence your grade will be capped at 0% **– do not forget to tap in your student card.**

# 6. FEEDBACK

Feedback will normally be given to students 15 working days after the final submission of an assignment or as advised by their module leader.

Feedback will be given in a variety of ways, this may be verbal, written, sketched or demonstrated, the vital aspect of design learning is that the student absorbs the feedback through note taking, reacts to feedback, and reiterates their design proposal in a timely fashion.

# 7. INTRODUCTION TO STUDYING THE MODULE

## 7.1 Overview of the Main Content

The project brief(s) will be used to emphasise students' awareness for new design approaches as well as provide opportunities to strength the interdisciplinary nature of design. You will work on conceptual and digital design for future scenarios and develop mobile digital tools, user case diagrams, wireframes, user interface and interaction.

## 7.2 Overview of Types of Classes

The module is comprised of lectures, tutorials, demonstrations and visits to public exhibitions. Students are expected to work in the studio and independently, to participate in active research, engage with different users and communities, in discussion as well as written and visual presentation related activities.

## 7.3 Importance of Student Self-Managed Learning Time

You are expected to apply design skills and methodologies learned during level 4 modules, to apply the design process with rigour and professionalism, to attend all sessions and participate fully in seminars and presentations. You are also expected to liaise with and consult teaching staff throughout the project. In addition to the timetabled sessions, you will have to work extremely hard independently in order to produce work of an appropriate standard. This module guide states the minimum amount of time you will need to devote to your project work. The design profession is very competitive and therefore it is not enough simply to produce work of a minimum standard. You should strive for excellence in all aspects of the project in order to learn as much as possible and develop a strong project for your portfolio.

## 7.4 Employability

- You will improve your project and time management skills;
- Understand the basic of Service Design
- Be able to develop digital tools and prototype them
- Refine your visual communication skills and your aesthetic awareness: in two – dimensional design work through exploration of composition, balance, layout, attention to detail etc.;
- Verbal communication studies: improve your verbal communication skills by presenting your design work to an audience;
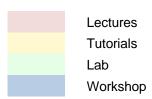
# 8. THE PROGRAMME OF TEACHING, LEARNING AND ASSESSMENT

A detailed programme will be made available on the module VLE site, please be aware that on occasion the schedule can change, but the tutors will communicate any change in advance.

| W | S | Date | Time | Room | Lec | Topic |
|---|---|------|------|------|-----|-------|
| **SEMESTER 2** | | | | | | |
| **Citizen Participation** | | | | | | |
| 29 | 1 | 10-Feb | 10:30-13:30 | BR-B49 | SS | Introduction to module<br>Project 1: **Citizen Participation in democratic processes**<br>Initial research: secondary research, questionnaires, surveys… |
| | 2 | 10-Feb | 14:00-17:00 | BR-B49 | SS | **USABILITY & USER EXPERIENCE** |
| | 3 | 11-Feb | 14:00-17:00 | BR-B49 | SS | Intro to **INTERACTIVE PROTOTYPING**<br>**Marvel app Demo by Diana Gray** |
| | 4 | 13-Feb | 10:00-13:00 | T 807 | SS | Initial concepts development<br>**UX DEVELOPMENT: WIREFRAMES**<br>Project tutorials |
| | 5 | 13-Feb | 14:00-17:00 | BR-B49 | SS | **3 Concept presentations** |
| 31 | 1 | 24-Feb | 10:30-13:30 | BR-B49 & BR-253 | SS | **PROJECT BRANDING:** graphic identity concept presentation and complete wireframes<br>**PROJECT TUTORIALS** |
| | 2 | 24-Feb | 14:00-17:00 | BR-253 | SS | **UX DESIGN: Interaction & User interface**<br>Building interactive prototype |
| | 3 | 25-Feb | 14:00-17:00 | BR-153 | SS | Interactive prototype (cont.) |
| | 4 | 27-Feb | 10:00-13:00 | T 807 | SS | Finalising Interactive prototype |
| | 5 | 27-Feb | 14:00-17:00 | BR-B49 | SS+AF | **Crit and project feedback** |
| **Vaccination** | | | | | | |
| 34 | 1 | 16-Mar | 10:30-13:30 | BR-B49 | SS+AA | Project 2: **Vaccination- increasing public trust**<br>Preliminary research<br>**Guest lecture: Alison Alvarez** |
| | 2 | 16-Mar | 14:00-17:00 | BR-B49 | SS | **SERVICE DESIGN** |
| | 3 | 17-Mar | 10:30-12:30 | BR-B49 | SS | Wellcome Collection visit: Preliminary research |
| | 4 | 17-Mar | 14:00-17:00 | BR-B49 | SS | Exhibition research findings (roundtables)<br>Project tutorials<br>**SERVICE BLUEPRINT** |
| | 5 | 18-Mar | 10:00-13:00 | BR-B49 | SS | Concept development<br>Project tutorials |
| | 6 | 20-Mar | 14:00-17:00 | BR-B49 | SS+AA | Research and Concept presentations |
| 35 | 1 | 23-Mar | 10:30-13:30 | BR-B49 | SS | Project brief and service blueprint |
| | 2 | 23-Mar | 14:00-17:00 | BR-B49 | SS | Design proposal development |
| | 3 | 24-Mar | 14:00-17:00 | BR-B49 | SS | Design detailing |
| | 4 | 26 Mr | 10:00-13:00 | BR-B49 | SS | Finalising proposals and presentation |
| | 5 | 26-Mar | 14:00-17:00 | BR-B49 | SS+AA | Project Presentation & feedback |

Lecturers

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|---|---|
| SS | Susana Soares |
| AA | Alison Alvarez |

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|---|---|
| ▨ | Lectures |
| ▨ | Tutorials |
| ▨ | Lab |
| ▨ | Workshop |

# 9. STUDENT EVALUATION

Students particularly enjoyed learning new software and working on mobile applications since it is relevant for the design process.

# 10. LEARNING RESOURCES

### 10.1 Core Materials

- Nature: Collaborations in Design: Cooper Hewitt Design Triennial, Cooper Hewitt, Smithsonian Design Museum, 2019
- Synthetic Aesthetics: Investigating Synthetic Biology's Designs on Nature – Ginsberg, A. D.; Calvert, J. 2014
- Making Futures: Marginal Notes on Innovation, Design, and Democracy – Ehn, P.; Nilsson, E.; Topgaard, R. 2014
- Hello World: Where Design Meets Life – Rawsthron, A. 2013
- This is Service Design Thinking: Basics-Tools-Cases, Marc Stickdorn & Jakob Schneider, BIS Publishers, 2012
- Art + Science Now: How scientific research and technological innovation are becoming key to 21st-century aesthetics – Wilson, S. 2012
- Interdisciplinary Interaction Design: A Visual Guide to Basic Theories, Models and Ideas for Thinking and Designing for Interactive Web Design and Digital Device Experiences – Pannafino, J., 2012
- Digital by Design: crafting technology for products and environments, Troika, Conny Freyer, Sebastien Noel, Eva Rucki, Thames & Hudson, 2010
- Design interactions, Moggridge, B., 2006
- In the Bubble: Designing in a Complex World, John Thackara, The MIT Press, 2006