

Computer Science (Human Computer Interaction) MEng (Hons) options 2017

You must take these core units making up a minimum of 120 credits.

Level 1 - compulsory units

All of the units in this pool are mandatory.

| Code | Title | Credits |
|-----------|---|---------|
| COMP10120 | First Year Team Project | 20 |
| COMP15111 | Fundamentals of Computer Architecture | 10 |
| COMP16121 | Object Oriented Programming with Java 1 | 20 |
| COMP16212 | Object Oriented Programming with Java 2 | 10 |
| COMP18112 | Fundamentals of Distributed Systems | 10 |
| BIOL10832 | Excitable Cells | 10 |
| PSYC10100 | Research Methods | 20 |
| PSYC10431 | Introduction to Cognition | 5 |
| PSYC11222 | Brain and Behaviour | 10 |
| PSYC11322 | Sensation & Perception | 5 |

Level 2 options

You will be automatically enrolled on nine course units which total 90 credits.

For the remaining 30 credits:

You need to select a minimum of two course units totalling 20 credits or a maximum of three course units totalling 30 credits from Option Pool 1.

You may select a minimum of zero course units or a maximum of one course unit totalling 10 credits from Option Pool 2.

If you take a 20 credit whole year course unit you are not permitted to drop this unit when course unit selection reopens at the start of semester 2.

You must ensure your credits are balanced over the academic year (60 credits in each semester).

Level 2 - compulsory units

All of the units in this pool are mandatory.

| Code | Title | Credits | Theme |
|-----------|--|---------|-----------------------------|
| COMP23111 | Fundamentals of Databases | 10 | Web and Distributed Systems |
| COMP23311 | Software Engineering 1 | 10 | Agile Methods |
| COMP23412 | Software Engineering 2 | 10 | Software Engineering |
| COMP25111 | Operating Systems | 10 | Computer Architecture |
| COMP28112 | Distributed Computing | 10 | Web and Distributed Systems |
| BIOL22332 | Motor Systems for Human Computer Interaction | 10 | None |
| BIOL22341 | Sensory Systems for Human Computer Interaction | 10 | None |
| PSYC21112 | Perception & Action | 5 | None |
| PSYC21122 | Cognitive Neuroscience | 10 | None |
| PSYC21181 | Cognition | 5 | None |
| SOST20022 | Essentials of Survey Design & Analysis | 20 | None |

Level 2 - option pool 1

From this option pool choose 10 credits.

| Code | Title | Credits | Theme |
|-----------|-----------------------|---------|-------------------------------|
| COMP25212 | System Architecture | 10 | Computer Architecture |
| COMP28411 | Computer Networks | 10 | Mobile Computing and Networks |
| COMP28512 | Mobile Systems | 10 | Mobile Computing and Networks |
| BIOL21321 | Membrane Excitability | 10 | None |
| BIOL21451 | How to Make a Brain | 10 | None |

Level 3 options

You will be automatically enrolled on six course units, including the Third Year Project course unit, totalling

<u>100 credits</u>.

For the remaining <u>20 credits</u>:

You may choose a minimum of zero course units or a maximum of one course unit totalling <u>10 credits</u> from Option Pool 1.

You may choose a minimum of zero course units or a maximum of one course unit totalling <u>10 credits</u> from Option Pool 2.

You may choose a minimum of zero course units or a maximum of two course units totalling <u>20 credits</u> from External Option Pool 1 (listed as Option Pool 3 below).

If you take a <u>20 credit</u> whole year course unit you are not permitted to drop this unit when course unit selection reopens at the start of semester 2.

You must ensure your credits are balanced over the academic year (<u>60 credits</u> in each semester).

Level 3 - compulsory units

All of the units in this pool are mandatory.

| Code | Title | Credits | | Theme |
|-----------|---|---------|----------------------------|-------|
| COMP30030 | 3rd Year Project (Joint Hons 30 Credits) | 30 | None | |
| COMP33511 | User Experience | 10 | Interactive Systems Design | |
| MCEL30031 | Enterprise Management for Computer Scientists | 10 | None | |
| MCEL30032 | Managing Finance in Enterprises for Computer Scientists | 10 | None | |
| SOST30022 | Advanced Social Network Analysis | 20 | None | |

Level 3 - option pool 1

From this option pool choose 20 credits.

| Code | Title | Credits | | Theme |
|-----------|---|---------|--|-------|
| COMP31111 | Verified Development | 10 | Rigorous Development | |
| COMP33711 | Agile Software Engineering | 10 | Agile Methods | |
| COMP33812 | Software Evolution | 10 | Agile Methods | |
| COMP34412 | Natural Language Systems | 10 | Natural Language, Representation and Reasoning | |
| COMP36512 | Compilers | 10 | Computer Languages | |
| COMP38120 | Documents, Services and Data on the Web | 20 | Web and Distributed Systems | |

Level 3 - option pool 2

From this option pool choose 20 credits.

| Code | Title | Credits | | Theme |
|-----------|---|---------|------|-------|
| BIOL21451 | How to Make a Brain | 10 | None | |
| BIOL31681 | Clocks, Sleep & the Rhythms of Life | 10 | None | |
| BIOL31692 | Learning, Memory & Cognition | 10 | None | |
| PSYC31122 | Emotion | 20 | None | |
| PSYC31142 | The Psychology of Time | 10 | None | |
| PSYC31242 | Understanding Dementia: Brain & Behaviour | 20 | None | |
| SOAN30811 | Anthropology of Vision, Memory and the Senses | 20 | None | |
| SOST30031 | Modelling Social Inequality | 20 | None | |

You will be automatically enrolled on the Summer Industrial Project and MCEL40042: Business Feasibility Study which totals <u>40 credits</u>.

For the remaining <u>90 credits</u>:

You need to select a minimum of one course unit totalling <u>15 credits</u> or a maximum of two course units totalling <u>30 credits</u> from Option Pool 1.

You need to select one course unit totalling <u>15 credits</u> from Option Pool 2.

You may select a minimum of zero course units and a maximum of one course unit totalling <u>15 credits</u> from Option Pool 3.

You need to select a minimum of one course unit totalling <u>15 credits</u> or a maximum of two course units totalling <u>30 credits</u> from Option Pool 4.

You need to select a minimum of one course unit totalling <u>15 credits</u> or a maximum of two course units totalling

<u>30 credits</u> from Option Pool 5.

Level 4 - compulsory units

All of the units in this pool are mandatory.

| Code | Title | Credits |
|-----------|----------------------------|---------|
| COMP40901 | UG MEng Industrial Project | 25 |
| MCEL40042 | Business Feasibility Study | 15 |

Level 4 - option pool 1

From this option pool choose 45 credits.

| Code | Title | Credits |
|-----------|--|---------|
| COMP60411 | Modelling data on the web | 15 |
| COMP60711 | Data Engineering | 15 |
| COMP61011 | Foundations of Machine Learning | 15 |
| COMP61021 | Modelling and visualization of high-dimensional data | 15 |
| COMP61232 | Mobile and Energy Efficient Systems | 15 |
| COMP61242 | Mobile Communications | 15 |
| COMP61332 | Text Mining | 15 |
| COMP62342 | Ontology Engineering for the Semantic Web | 15 |
| COMP62421 | Querying Data on the Web | 15 |
| COMP62532 | Component-based Software Development | 15 |

Level 4 - option pool 2

From this option pool choose 15 credits.

| Code | Title | Credits |
|-----------|---------------------------------------|---------|
| COMP60532 | Principles of Digital Biology | 15 |
| BIOL60771 | Advanced Biotechnology | 15 |
| BIOL61820 | Bioinformatics for Systems Biology | 15 |
| PSYC60132 | Cognitive and Social Neuroscience | 15 |
| SOST70011 | Introduction to Statistical Modelling | 15 |

Level 4 - option pool 3

From this option pool choose 15 credits.

| Code | Title | Credits |
|-----------|---|---------|
| COMP60542 | Introduction to Health Informatics | 15 |
| BIOL60140 | Advanced Methods for Biological Sequence Analysis | 15 |
| PSYC60142 | Clinical and Behavioural Neuroscience | 15 |
| SOST70292 | Multilevel Modelling | 15 |