

UNDERGRADUATE COURSE COMPARISON TABLE

	BSc Computer Science	BSc Data Science and Artificial Intelligence	BA Digital Humanities & Information Technology	BA Psychology & Computing
Overall	Are you keen to understand the scientific and engineering principles of how computers work and study advanced topics e.g. AI and cyber-security? (CK401)	Do you like mathematics? Would you like to combine statistics with computing for advanced decision making? (CK411)	Are you interested in the humanities? How about applying computing skills for cultural and societal benefits? (CK118)	Are you interested in the psychology of how people use computing devices and how technology can be made more human-centric? (CK121)
Approx. intake	80	35	35	30
Additional entry reqt.	O2/H6 in Mathematics O6/H7 in English O6/H7 in Irish (unless exempt)	H3 in Mathematics O6/H7 in English O6/H7 in Irish (unless exempt)	O6/H7 in English O6/H7 in Irish (unless exempt) O6/H7 in another language	O2/H6 in Mathematics O6/H7 in English O6/H7 in Irish (unless exempt) O6/H7 in another language
Schools/ Departments involved	Computer Science	Computer Science (50%) and Mathematical Sciences (50%)	Year 1: Computer Science + Digital Humanities (45 cr. together) + Arts Minor Subject (15 credits) choose one from: Archaeology; Béaloideas; Celtic Civilisation; Chinese Studies; English; Geography; German; Greek; Italian; Latin; Philosophy; Politics; Religions and Global Diversity, Sociology, Spanish.	Computer Science (50%) and Psychology (50%)
Duration	4 years	4 years	3 years, or 4 years with work placement or study abroad	3 years, or 4 years with work placement or study abroad
Points	2019 (402); 2020 (468); 2021 (495); 2022 (507); 2023 (510); 2024 (500); 2025 (452); 2026 (384)	2019 (509); 2020 (510); 2021 (531); 2022 (465); 2023 (445); 2024 (427); 2025 (469); 2026 (456)	2019 (307); 2020 (336); 2021 (339); 2022 (347); 2023 (328); 2024 (356); 2025 (300); 2026 (328)	2019 (402); 2020 (466); 2021 (488); 2022 (478); 2023 (488); 2024 (498); 2025 (409); 2026 (474)
Work placement	Compulsory	Compulsory	Optional	Optional
Key Areas of Study	Artificial Intelligence; Computer Architecture; Algorithms and Data Structures; Programming; Software Engineering; Operating Systems; Networks and Security...	Machine Learning; Statistical Modelling; Data Analytics; Big Data Algorithms; Data Visualisation...	Programming Fundamentals; Databases for Digital Humanities; Web Systems; Digital Tools and Methods; Data Analytics for Digital Humanities; Digital Content Management...	Interaction Design, Social Computing, Human-Centred Computing, User Experience (UX), Applied Cognition, Research Design and Statistical Analysis...

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Programming	No prior experience necessary	No prior experience necessary	No prior experience necessary	No prior experience necessary
Programming languages	Python, Java, C, JavaScript and Haskell	Python, R, Java, C, JavaScript	Python, JavaScript	Python, JavaScript
Careers opportunities (but not limited to)	Mobile/ Multimedia Development; Project Management; Security Analysis; Software Engineering and Development; Systems Administration; Systems Development; Technical Consultancy; IT Analysis...	Big data Development; Business Analytics; Customer Analysis; Data Analysis and Reporting; Data Engineering; Data Science; Data Science and Modelling; Data Warehouse Management; Fraud and Risk Analysis ...	Cultural Production; Digital Archivist; Digital Content Curation; Digital Publishers; Digital Resources Specialist; User Experience; User Design; Software Localisation / Languages....	UX/UI Design, User Research, Human-Computer Interaction, Usability Testing and Software Development. •Evaluate technologies such as video games; social media, interactive exhibitions; simulated environments e.g. VR •Design interfaces that interpret and mimic human senses, i.e. touch, speech, gestures e.g. robots, personal assistant such as Alexa, Siri.
Sample Companies / Types of Recruiting Graduates	Apple, Credit Suisse, Dell EMC, IBM, Microsoft, Pilz, VMware, Xerox, Accenture, Capspire, CH Robinson, Ericsson, Fidelity Investments, Google, CitySwift, LibertyIT	AIB/BOI, Amazon, Apple, EMC, Ernst & Young, Facebook, Google, Government Departments / State Agencies, Paddy Power, PWC, Tesco, 8 West, Allianz, KPMG, Qualcomm, Teamwork	Museums, Social Media Companies, News media e.g. Google, Apple, Johnson Controls, Indeemo, Dell, Oracle, Pfizer, PWC, EY, self-employment	Companies developing hardware & software to meet end-user needs across a wide range of industries, including Apple, Jaguar/Landrover, Logitech, Google, Instagram, Teamworks, Accenture, Ericsson, Deloitte, Vodafone
Further study in CS and Psychology related areas	1. MSc Computing Science 2. MSc Data Science & Artificial Intelligence 3. MSc Cybersecurity MSc (research) / PhD (2H1 in UG degree)	1. MSc Computing Science 2. MSc Data Science & Artificial Intelligence MSc (research) / PhD (2H1 in UG degree)	MSc Interactive Media MSc Research / PhD (2H1 in UG degree)	Graduates achieving 2H1 or above are eligible for graduate membership of the Psychological Society of Ireland (PSI). This provides opportunities to pursue postgraduate study in Psychology. MSc Computing Science, 2H1 eligibility criteria MSc Research / PhD for those who achieve 2H1

CK413 - BEd (Hons) Science Education: teaching qualification (4 years)

- Computer Science and Maths: H3 in Maths required
- Computer Science and Chemistry: H4 in Maths required (plus 06/H7 in a Lab Science if H4 is in Maths, Applied Maths or Computer Science)