

UNDERGRADUATE COURSE COMPARISON

	BSc Computer Science	BSc Data Science & Analytics	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	45	30
Additional entry reqt.	O2/H6 in Mathematics O6/H7 in English O2/H6 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 Statistics (50%)	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 / 4 years with placement or academic year abroad	3 years / 4 years with placement
Points	2019 (402); 2020 (468); 2021 (495); 2022 (507); 2023 (510); 2024 (500)	2019 (509); 2020 (510); 2021 (531) 2022 (465); 2023 (445); 2024 (427)	2019 (307); 2020 (336); 2021 (339); 2022 (347); 2023 (328); 2024 (356)	2019 (402); 2020 (466); 2021 (488); 2022 (478); 2023 (488); 2024 (498)
Work placement	Compulsory	Compulsory	Optional	Optional
Programming	No prior experience necessary	No prior experience necessary	No prior experience necessary	No prior experience necessary
Differentiating modules	Artificial Intelligence, Computer Architecture, Data structure & Algorithms / Compilers, Middleware, Programming, Security, Systems & Networks...	Distributed / Big Data Algorithms; Machine learning, Data Visualisation...	Internet Computing; Information Systems and Electronic Commerce; Student Learning in the Digital Age; Digital Tools & Methodologies...	Interaction Design, Social Computing, Human-Centred Computing, User Experience (UX), Applied Cognition, Research Design and Statistical Analysis...

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Programming languages	Python, Java, C, JavaScript and Haskell	Python, R, Java, C, JavaScript	Python, JavaScript and HTML	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 Analytic; 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....	The demand greatly exceeds the supply for qualified graduates to: •Evaluate the effectiveness of technologies such as video games; social media, interactive exhibitions; simulated environments e.g. VR •Invent 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, Ernest & 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 & Analytics, MSc (research) / PhD (2H1 in UG degree)	1.MSc Computing Science MSc (research) / PhD (2H1 in UG degree)	MSc Research / PhD (2H1 in UG degree)	1.Higher Diploma in Psychology – CKA01 is a conversion course which makes you eligible to become a graduate member of Psychological Society of Ireland. 2.Higher Diploma in Applied Computer Technology - those who achieve a 1H can apply for the MSc Data Science & Analytics 3.MSc Interactive Media MSc Research / PhD for those who achieve 2H1

BSc Education: teacher qualification (4 years) CK413

- Computer Science and Maths: H3 in Maths required
- Computer Science and Chemistry