

Sample Study Plan for BEng(DS&E) with Minor in Neuroscience

		Semester 1		Semester 2	
Year 1 (60 cu)	UG5 Requirements* (18 cu) Engineering Core (24 cu) DS&E (12 cu) Neuroscience (6 cu)	ENGG1330	Computer programming I	ENGG1340	Computer programming II
		MATH1013	University mathematics II	MATH2014	Multivariable calculus and linear algebra
		ENGG1320 / CAES1000	Engineers in the modern world / Core University English	ENGG1320 / CAES1000	Engineers in the modern world / Core University English
		CC	University Common Core	COMP2501	Introduction to data science and engineering
		CC	University Common Core	PSYC1001	Introduction to psychology
Year 2 (60 cu)	UG5 Requirements* (24 cu) DS&E (18 cu) Electives (6 cu) Neuroscience (12 cu)	STAT2601	Probability and statistics I	STAT2602	Probability and statistics II
		COMP2119	Introduction to data structure and algorithms	CC	University Common Core
		CC	University Common Core	CC	University Common Core
		CC	University Common Core	Free Elective	Elective course in any disciplines
		PSYC2101	Foundations of neuroscience I	PSYC2103	Foundations of neuroscience II
Year 3 (60 cu)	UG5 Requirements* (6 cu) DS&E (30 cu) Capstone (6 cu) Electives (6 cu) Neuroscience (12 cu)	COMP3314	Machine learning	COMP3278	Introduction to database management systems
		COMP3312	Law and ethics in data science	COMP3522	Real-life data science
		DS&E Elective	Elective course in DS&E	DS&E Elective	Elective course in DS&E
		CENG9001 / Free Elective	Practical Chinese for Engineering Students / Elective course in any disciplines	CENG9001 / Free Elective	Practical Chinese for Engineering Students / Elective course in any disciplines
		PSYC2111	Neurobiological basis of psychological issues	PSYC3054	Human neuropsychology
	Summer (0 cu)	COMP3510	Internship		
Year 4 (60 cu)	UG5 Requirements* (6 cu) DS&E (18 cu) Capstone (6 cu) Electives (24 cu) Neuroscience (6 cu)	COMP4501 or COMP4502	Data Science in Discipline Project or Final Year Project	DS&E Elective	Elective course in DS&E
		CAES9542	Technical English for Computer Science	DS&E Elective	Elective course in DS&E
		DS&E Elective	Elective course in DS&E	Free Elective	Elective course in any disciplines
		BBMS3011**	Molecular neuroscience	Free Elective	Elective course in any disciplines
		Free Elective	Elective course in any disciplines	Free Elective	Elective course in any disciplines

* UG5(e) requirement – Successful – Successful completion of any other non-credit bearing course(s) for fostering students' whole-person development.

** Students may also take BIOL3105, BBMS2003, BMED3501 to satisfy the minor in Neuroscience requirements. Note that students will need to satisfy the prerequisites of these courses as free electives.