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In order to make semester study abroad easier to do in chemical engineering, we have developed pre-approved paths at the University of Manchester and Edinburgh University. Both great places! See below for details (note red items are changes to the normal path). We are also creating a Semester Abroad Breadth Sequence, which consists of three upper-level technical courses that do not need to be in one coherent area; this sequence will make it easier to work towards completing a breadth sequence while spending a semester abroad. Please contact me if possibly interested one of these options, and we can discuss further.

Normal Path at CWRU

Fall 2	Spring 2	Fall 3	Spring 3	Fall 4	Spring 4
ECHE 260	ECHE 363	ECHE 360	ECHE 361	ECHE 362	ECHE 399
MATH 223	MATH 224	ECHE 367	ECHE 364	ECHE 398	ENGR 200
ENGR 225	STAT 313	ENGR 210	ECHE 365	MATER ELEC	PCHEM ELEC
CHEM 223	SCI ELEC	CHEM 290	ENGR/L 398	BREADTH II	BREADTH III
SAGES III	HUM/SS I	BREADTH I	HUM/SS II	HUM/SS III	HUM/SS IV

Semester Abroad at University of Manchester, Spring 2rd Year

Fall 2	Spr 2 Abroad	Fall 3	Spring 3	Fall 4	Spring 4
ECHE 260	M_ECHE 363	ECHE 360	ECHE 361	ECHE 362	ECHE 399
MATH 223	M_MATH 224	ECHE 367	ECHE 364	ECHE 398	ENGR 200
ENGR 225	M_BRDTH I	ENGR 210	ECHE 365	SCI ELEC	Extra course[a]
CHEM 223	M_MATER EL	CHEM 290	ENGR/L 398	BREADTH II	BREADTH III
SAGES III	M_PCHEM EL	STAT 313	HUM/SS II	HUM/SS III	HUM/SS IV
	M_HUM/SS I				

Semester Abroad at University of Manchester, Spring 3rd Year

Fall 2	Spring 2	Fall 3	Spr 3 Abroad	Fall 4	Spring 4
ECHE 260	ECHE 363	ECHE 360	M_ECHE 361	ECHE 362	ECHE 399
MATH 223	ECHE 364	ECHE 367	M_MATER EL	ECHE 398	ECHE 365
ENGR 225	MATH 224	ENGR 210	M_PCHEM EL	SCI ELEC	ENGR 200
CHEM 223	STAT 313	CHEM 290	M_BRDTH II	ENGR/L 398	BREADTH III
SAGES III	HUM/SS I	BREADTH I	M_HUM/SS II	HUM/SS III	HUM/SS IV
			Extra course[a]		

Semester Abroad at Edinburgh University, Fall 4th Year

Fall 2	Spring 2	Fall 3	Spring 3	Fall 4 Abroad	Spring 4[c]
ECHE 260	ECHE 363	ECHE 360	ECHE 361	E_ECHE 362	ECHE 399
MATH 223	MATH 224	ECHE 367	ECHE 364	E_ECHE 398	ENGR 200
ENGR 225	STAT 313	ENGR 210	ECHE 365	ELEC[b]	PCHEM ELEC
CHEM 223	SCI ELEC	CHEM 290	ENGR/L 398	ELEC[b]	BREADTH III
SAGES III	HUM/SS I	BREADTH I	HUM/SS II	ELEC[b]	HUM/SS IV
				Extra course[a]	

[a] Courses are 2.5 credits (unless otherwise noted), so need extra course to make up for deficit
[b] ELEC courses could be MATER_ELEC, PCHEM_ELEC, BREADTH or HUM/SS as needed
[c] Must take at least 15 credits in last semester in order to satisfy senior residency requirement

Courses at University of Manchester

M_ECHE 361: Distillation & Absorption, CHEN20072
M_ECHE 363: Chemical Thermodynamics, CHEN10192
M_MATH 224: Engineering Mathematics 2, CHEN10072
M_BREADTH: Process Safety, CHEN20152; OR Engineering Biotechnology, CHEN10162; OR Materials courses (below)
M_MATER ELEC: Mechanical Behaviour, MATS16102; OR Structure of Solids, MATS16202; OR Functional Properties and Environmental Interactions, MATS16302
M_PCHEM ELEC: Core Physical Chemistry, CHEM20212; OR Molecular Modelling & Simulation in Chemical Engineering, CHEN40232 (3.75 cr)

Courses at Edinburgh University

E_ECHE 362: Chemical Engineering Laboratory 3
E_ECHE 398: Chemical Engineering Design: Synthesis and Economics 4
E_BREADTH: Fluid Mechanics (Chemical) 4; OR Chemical Engineering Design 4; OR Engineering Project Management 4; OR Fire Science and Fire Dynamics 4; OR Fire Investigation and Failure Analysis 5; OR Operations Management 4; OR Process Safety and Environmental Issues in Chemical Engineering 3 (5 credits)
E_PCHEM ELEC: Molecular Thermodynamics 5
E_MATER ELEC: Polymer Science and Engineering