

School of Chemistry

Entry to Honours

Students who attain an average of grade 11.0 or above at the first sitting in the requisite 2000-level modules and who meet all other programme requirements will be given automatic offers of entry into Honours programmes*.

*Apart from students on Integrated Masters degrees.

Students permitted automatic entry to Honours will only be permitted to trail one module to a maximum of 30 sub-honours credits into Honours.

This School also allows 'Qualified Entry to Honours' as defined in: **Entry to Honours**

BSc Honours

The general requirements are 480 credits over a period of normally four years (and not more than five years) or part-time equivalent, of which the final two years form an approved Honours programme of 240 credits, of which 90 credits are at 4000 level and at least a further 120 credits at 3000 and/or 4000 levels.

BSc Honours with Integrated Year Abroad

The general requirements are 540 credits over a period of normally five years (and not more than six years) or part-time equivalent, of which the final three years are an approved Honours programme of 300 credits, of which 60 credits are gained during the integrated year abroad, 90 credits are at 4000 level and at least a further 120 credits at 3000 and/or 4000 levels.

MChem Honours

The general requirements are 600 credits over a period of normally five years (and not more than six years) or part-time equivalent, the final three years of which form an approved Honours programme of 360 credits, of which 120 credits are at 5000 level and at least a further 210 credits at 3000 and 4000 levels.

MSci Honours

The general requirements are 600 credits over a period of normally five years (and not more than six years) or part-time equivalent, the final three years of which form an approved Honours programme of 360 credits, of which 120 credits are at 5000 level and at least a further 210 credits at 3000 and 4000 levels.

Other information: Direct entry into Level 2000 is possible, in which case credit of 120 credits at level 1000 is given on the basis of school examinations.

Study Abroad: In the case of students who spend part of the Honours programme on a recognised Study Abroad scheme, the Programme Requirements will be amended to take into account overseas courses which are approved by the relevant St Andrews School in the Learning Agreement.
(see www.st-andrews.ac.uk/studyabroad/outgoingstudents/AcademicInformation/).

Professional Accreditation: Unless otherwise stated all degree programmes in Chemistry are accredited by the Royal Society of Chemistry (RSC) for professional membership.

Chemistry - Programme Requirements - 2016/7 - August 2016

Biomolecular Science - Single Honours BSc

First Year: 80 credits: BL1101 **and** BL1102 **and** CH1401 **and** CH1601.
Second Year (2015/6 or earlier): 60 credits: BL2101 **and** BL2104 - with an average grade of 11 or better 60 credits: CH2501 **and** CH2601 - with an average of grade 11 or better.

Second Year (2016/7 onwards): 60 credits: BL2301, BL2302, BL2306 and BL2309 - with an average grade of 11 or better
60 credits: CH2501 **and** CH2601 - with an average of grade 11 or better

Third Year: 120 credits: BL3301 **and** BL3310 **and** CH3431 **and** CH3612 **and** CH3613 **and** CH3615 **and** CH3621 **and** CH3716 **and** PN3312.

Fourth Year: 65 credits: BL4210 **and** CH4442;
45 credits in three of: BL4212, BL4213, BL4215, BL4216, BL4222, BL4223;
10 credits in one of: CH4612, CH4614, CH4615, CH5611, CH5612, CH5613, CH5614, CH5616.

Alternatively, by special arrangement only:
75 credits: BL4201 **and** BL4210;
50 credits in five of: CH4612, CH4614, CH4615, CH5611, CH5612, CH5613, CH5614, CH5616.

Other information: This course does not have RSC accreditation

Biomolecular Science - Single Honours BSc

Direct entry to second year for approved candidates with 120 advanced standing credits.

Second Year(2015/6 or earlier): 10 credits: CH1202;
60 credits: BL2101 **and** BL2104 - with an average grade of 11 or better 60 credits: CH2501 **and** CH2601 - with an average of grade 11 or better.

Second Year (2016/7 onwards): 60 credits: BL2301, BL2302, BL2306 and BL2309 - with an average grade of 11 or better
60 credits: CH2501 **and** CH2601 - with an average of grade 11 or better.

Third Year: 120 credits: BL3301 **and** BL3310 **and** CH3431 **and** CH3612 **and** CH3613 **and** CH3615 **and** CH3621 **and** CH3716, PN3312.

Fourth Year: 65 credits: BL4210 **and** CH4442;
45 credits in three of: BL4212, BL4213, BL4215, BL4216, BL4222, BL4223;
10 credits in two of: CH4612, CH4614, CH4615, CH5611, CH5612, CH5613, CH5614, CH5616.

Alternatively, by special arrangement only:
75 credits: BL4201 **and** BL4210;
50 credits in five of: CH4612, CH4614, CH4615, CH5611, CH5612, CH5613, CH5614, CH5616.

Other information: This course does not have RSC accreditation

Chemical Sciences - Single Honours BSc	
First Year:	60 credits: CH1401 and CH1402 and CH1601.
Second Year:	90 credits: CH2501 and (CH2601 or CH2603) and CH2701 - with an average of grade 11 or better.
Third Year:	30 credits: CH3431 and CH3441; 20 or 30 credits from: CH3521, CH3621, CH3721; Remaining 60 or 70 credits from: CH3512, CH3513, CH3514, CH3612, CH3613, CH3615, CH3712, CH3715, (CH3716 or CH3717).
Fourth Year:	50 credits: CH4442; 30 credits: CH4514 and CH4614 and CH4716; 40 credits in four of: CH4515, CH4612, CH4615, CH4715, CH4717, CH5516 - CH5518, CH5612 - CH5614, CH5616, CH5713 - CH5715, CH5717.
Other information: This course is aimed at those who like Chemistry and were good at it at school, who want the varied training that a Chemistry Degree gives, but who do not wish to be professional Chemists. Up to 30 credits from the 3000 - level and 4000 - level modules listed above can be replaced with modules from other relevant Schools.	

Chemical Sciences - Single Honours BSc	
Direct entry to second year for approved candidates with 120 advanced standing credits	
Second Year:	10 credits: CH1202; 90 credits: CH2501 and (CH2601 or CH2603) and CH2701 - with an average of grade 11 or better.
Third Year:	30 credits: CH3431 and CH3441; 20 or 30 credits from: CH3521, CH3621, CH3721; Remaining 60 or 70 credits from: CH3512, CH3513, CH3514, CH3612, CH3613, CH3615, CH3712, CH3715, (CH3716 or CH3717).
Fourth Year:	50 credits: CH4442; 30 credits: CH4514 and CH4614 and CH4716; 40 credits in four of: CH4515, CH4612, CH4615, CH4715, CH4717, CH5516 - CH5518, CH5612 - CH5614, CH5616, CH5713 - CH5715, CH5717
Other information: This course is aimed at those who like Chemistry and were good at it at school, who want the varied training that a Chemistry Degree gives, but who do not wish to be professional Chemists. Up to 30 credits from the 3000 - level and 4000 - level modules listed above can be replaced with modules from other relevant Schools.	

Chemistry - Single Honours BSc	
First Year:	60 credits: CH1401 and CH1402 and CH1601.
Second Year:	90 credits: CH2501 and (CH2601 or CH2603) and CH2701 - with an average of grade 11 or better.
Third Year:	120 credits: CH3431 and CH3441 and CH3514 and CH3512 and CH3521 and CH3612 and CH3615 and CH3621 and CH3712 and CH3717 and CH3721.
Fourth Year:	60 credits: CH4442 and CH4461; 30 credits: CH4514 and CH4614 and CH4716; 30 credits in three of: CH4515, CH4615, CH4715, CH4717, CH5516 - CH5518, CH5612 - CH5614, CH5616, CH5713-CH5715, CH5717

Chemistry - Programme Requirements - 2016/7 - August 2016

Chemistry - Single Honours BSc

Direct entry to second year for approved candidates with 120 advanced standing credits.

Second Year:	10 credits: CH1202; 90 credits: CH2501 and (CH2601 or CH2603) and CH2701 - with an average of grade 11 or better.
Third Year:	120 credits: CH3431 and CH3441 and CH3514 and CH3512 and CH3521 and CH3612 and CH3615 and CH3621 and CH3712 and CH3717 and CH3721.
Fourth Year:	60 credits: CH4442 and CH4461; 30 credits: CH4514 and CH4614 and CH4716; 30 credits in three of: CH4515, CH4615, CH4715, CH4717, CH5516 - CH5518, CH5612 - CH5614, CH5616, CH5713-CH5715, CH5717

Chemistry - Joint Honours BSc

Chemistry and Geology - Joint Honours BSc

First Year:	100 credits: CH1401 and CH1402 and CH1601 and ES1001 and ES1002.
Second Year:	60 credits: CH2501 and CH2701 - with an average of grade 11 or better. 60 credits: ES2001 and ES2002 - with passes at grade 11 or better in both.
Third Year:	120 credits: CH3431 and CH3715 and CH3521 and CH3513 and (CH3716 or CH3717) and CH3721 and ES3001 and ES3004 and ES3006 and ES3008.
Fourth Year:	30 credits in three of: CH4514, CH4715, CH4716, CH5711, CH5715, CH5717; 50 credits: (ES4010 with CH4448) or ID4441; 25 credits: CH5518 and ES3009; 15 credits in one of: ES3011, ES4006, ES4007, ES5006, ES5009, ID4001.

In total, 240 credits must be achieved at 3000 and 4000 level with at least 90 of these at 4000 level.

Other information: This course does not have RSC accreditation

Chemistry and Mathematics - Joint Honours BSc

Chemistry element of Chemistry and Mathematics Joint Honours BSc:

First Year:	60 credits: CH1401 and CH1402 and CH1601.
Second Year:	60 credits: CH2501 and CH2701 - with an average of grade 11 or better.
Third Year:	30 credits in three of: CH3431, CH3512, CH3615, CH3621, CH3717, CH3721; 30 credits: CH3441, CH3514, CH3521, CH3712, CH3715.
Fourth Year:	50 credits: CH4442; 10 credits: CH4514 or CH4515 or CH4612 or CH4614 or CH4615 or CH4715 or CH4716 or CH4717

In total, 240 credits must be achieved at 3000 and 4000 level with at least 90 of these at 4000 level.

Other information: This course does not have RSC accreditation

Chemistry with French - Honours BSc	
First Year:	100 credits: CH1401 and CH1402 and CH1601 and FR1001 and FR1002.
Second Year:	20 credits: FR2021; 20 credits: FR2022 - with a pass at grade 11 or better. 80 credits: CH2501 and CH2603 and CH2701 - with an average of grade 11 or better.
Third Year:	50 credits: CH3441 and FR3001 and FR3002; 70 credits in seven of: CH3431, CH3514, CH3512, CH3521, CH3612, CH3615, CH3621, CH3712, CH3717, CH3721.
Year Abroad:	<i>WIYA version only: 60 credits comprising FR3101.</i>
Fourth Year:	80 credits: CH4442 and FR4105 and FR4106; 40 credits in four of: CH4461, CH4514, CH4515, CH4614, CH4615, CH4715, CH4716, CH4717

Chemistry with Medicinal Chemistry - Single Honours BSc	
First Year:	60 credits: CH1401 and CH1402 and CH1601.
Second Year:	90 credits: CH2501 and (CH2601 or CH2603) and CH2701 - with an average of grade 11 or better.
Third Year:	120 credits: CH3431 and CH3441 and CH3514 and CH3512 and CH3521 and CH3612 and CH3613 and CH3615 and CH3621 and CH3716 and CH3721.
Fourth Year:	110 credits: CH4442 and CH4461 and CH4514 and CH4612 and CH4614 and CH4615 and CH5611; 10 credits in one of: CH5612 - CH5614, CH5616.

Chemistry with Medicinal Chemistry - Single Honours BSc	
Direct entry to second year for approved candidates with 120 advanced standing credits.	
Second Year:	10 credits: CH1202; 90 credits: CH2501 and (CH2601 or CH2603) and CH2701 - with an average of grade 11 or better.
Third Year:	120 credits: CH3431 and CH3441 and CH3514 and CH3512 and CH3521 and CH3612 and CH3613 and CH3615 and CH3621 and CH3716 and CH3721.
Fourth Year:	110 credits: CH4442 and CH4461 and CH4514 and CH4612 and CH4614 and CH4615 and CH5611; 10 credits in one of: CH5612 - CH5614, CH5616.

Materials Chemistry - Single Honours BSc	
First Year:	60 credits: CH1401 and CH1402 and CH1601.
Second Year:	90 credits: CH2501 and (CH2601 or CH2603) and CH2701 – with an average of grade 11 or better.
Third Year:	120 credits: CH3431 and CH3441 and CH3513 and CH3514 and CH3521 and CH3615 and CH3622 and CH3712 and CH3715 and CH3717 and CH3721;
Fourth Year:	120 credits: CH4442 and CH4453 and CH4461 and (CH4514 or CH4716) and CH4515 and CH4715 and CH4717 and 10 credits in either CH5711 or CH5713.

Chemistry - Programme Requirements - 2016/7 - August 2016

Materials Chemistry - Single Honours BSc

Direct entry to second year for approved candidates with 120 advanced standing credits.

Second Year:	10 credits: CH1202; 90 credits: CH2501 and (CH2601 or CH2603) and CH2701 – with an average of grade 11 or better.
Third Year:	120 credits: CH3431 and CH3441 and CH3513 and CH3514 and CH3521 and CH3615 and CH3622 and CH3712 and CH3715 and CH3717 and CH3721;
Fourth Year:	120 credits: CH4442 and CH4453 and CH4461 and (CH4514 or CH4716) and CH4515 and CH4715 and CH4717 and 10 credits in either CH5711 or CH5713.

Chemistry – Integrated Masters MChem

First Year:	60 credits: CH1401 and CH1402 and CH1601.
Second Year:	90 credits: CH2501 and (CH2601 or CH2603) and CH2701 - with an average of grade 11 or better in all and an average of 15 or better in any two.
Third Year:	120 credits: CH3431 and CH3441 and CH3514 and CH3512 and CH3521 and CH3612 and CH3615 and CH3621 and CH3712 and CH3717 and CH3721.
Fourth Year:	80 credits: CH4442 and CH4514 and CH4614 and CH4716 40 credits in four of: CH4515, CH4612, CH4615, CH4715, CH4717
Fifth Year:	90 credits: CH5441 and CH5461 and CH5511 and CH5611 and CH5711. 30 credits in three of: CH5516 - CH5518, CH5612 - CH5614, CH5616, CH5713 - CH5715, CH5717.

Chemistry – Integrated Masters MChem

Direct entry to second year for approved candidates with 120 advanced standing credits

Second Year:	10 credits comprising CH1202; 90 credits: CH2501 and (CH2601 or CH2603) and CH2701 - with an average of grade 11 or better in all and an average of 15 or better in any two.
Third Year:	120 credits: CH3431 and CH3441 and CH3514 and CH3512 and CH3521 and CH3612 and CH3615 and CH3621 and CH3712 and CH3717 and CH3721.
Fourth Year:	80 credits: CH4442 and CH4514 and CH4614 and CH4716 40 credits in four of: CH4515, CH4612, CH4615, CH4715, CH4717.
Fifth Year:	90 credits: CH5441 and CH5461 and CH5511 and CH5611 and CH5711. 30 credits in three of: CH5516 - CH5518, CH5612 - CH5614, CH5616, CH5713 - CH5715, CH5717.

Chemistry with External Placement – Integrated Masters MChem

First Year:	60 credits: CH1401 and CH1402 and CH1601.
Second Year:	90 credits: CH2501 and (CH2601 or CH2603) and CH2701 - with an average of grade 11 or better in all and an average of 15 or better in any two.
Third Year:	120 credits: CH3431 and CH3441 and CH3514 and CH3512 and CH3521 and CH3612 and CH3615 and CH3621 and CH3712 and CH3717 and CH3721.
Fourth Year:	120 credits: CH4441 and CH4455 and CH4456 and CH4458.
Fifth Year:	90 credits: CH5441 and CH5461 and CH5511 and CH5611 and CH5711; 30 credits in three of: CH5516 - CH5518, CH5612 - CH5614, CH5616, CH5713 - CH5715, CH5717.

Chemistry - Programme Requirements - 2016/7 - August 2016

Chemistry with External Placement – Integrated Masters MChem

Direct entry to second year for approved candidates with 120 advanced standing credits

Second Year:	10 credits: CH1202; 90 credits: CH2501 and (CH2601 or CH2603) and CH2701 – with an average of grade 11 or better in all and an average of 15 or better in any two.
Third Year:	120 credits: CH3431 and CH3441 and CH3514 and CH3512 and CH3521 and CH3612 and CH3615 and CH3621 and CH3712 and CH3717 and CH3721.
Fourth Year:	120 credits: CH4441 and CH4455 and CH4456 and CH4458.
Fifth Year:	90 credits: CH5441 and CH5461 and CH5511 and CH5611 and CH5711; 30 credits in three of: CH5516 - CH5518, CH5612 - CH5614, CH5616, CH5713 - CH5715, CH5717.

Chemistry with French – Integrated Masters MChem

First Year:	100 credits: CH1401 and CH1402 and CH1601 and FR1001 and FR1002.
Second Year:	20 credits: FR2021; 20 credits: FR2022 - with a pass at grade 11 or better. 80 credits: CH2501 and CH2603 and CH2701 - with an average of grade 11 or better in all and an average of 15 or better in any two.
Third Year:	50 credits: CH3441 and FR3001 and FR3002; 70 credits in seven of: CH3431, CH3514, CH3512, CH3521, CH3612, CH3615, CH3621, CH3712, CH3717, CH3721.
Fourth Year:	110 credits: CH4442 and CH4514 and CH4614 and CH4716 and FR5810; 10 credits in one of: CH4515, CH4615, CH4715, CH4717.
Fifth Year:	90 credits: CH5441 and CH5461 and FR4105 and FR4106; 30 credits in three of: CH5511, CH5516 - CH5518, CH5611 - CH5614, CH5616, CH5711 - CH5715, CH5717.

Chemistry with French and External Placement – Integrated Masters MChem

First Year:	100 credits: CH1401 and CH1402 and CH1601 and FR1001 and FR1002.
Second Year:	20 credits: FR2021; 20 credits: FR2022 - with a pass at grade 11 or better. 80 credits: CH2501 and CH2603 and CH2701 - with an average of grade 11 or better in all and an average of 15 or better in any two.
Third Year:	50 credits: CH3441 and FR3001 and FR3002; 70 credits in seven of: CH3431, CH3514, CH3512, CH3521, CH3612, CH3615, CH3621, CH3712, CH3717, CH3721.
Fourth Year:	120 credits: CH4441 and FR5810.
Fifth Year:	90 credits: CH5441 and CH5461 and FR4105 and FR4106; 30 credits in three of: CH5511, CH5516 - CH5518, CH5611 - CH5614, CH5616, CH5711 - CH5715, CH5717.

Chemistry - Programme Requirements - 2016/7 - August 2016

Chemistry with Mathematics – Integrated Masters MChem

First Year:	80 credits: CH1401 and CH1402 and CH1601 and MT1002. <i>(Students without prerequisite for MT1002 will take MT1001 in Semester 1.)</i>
Second Year (2013/4):	90 credits: CH2501 and CH2701 and MT2001 - with passes at grade 15 or better in all three; 30 credits: MT2002 (for Pure Maths options) or MT2003 (for Applied Maths options). <i>(Students wishing to take MT2002 need to discuss this with an Adviser of Studies)</i>
Second Year (2014/5 or later):	60 credits: CH2501 and CH2701 - with an average of grade 15 or better 15 credits: MT2501 - with a pass at grade 15 or better; At least 45 credits: MT2502 - MT2508 in at least one of the following: (MT2502, MT2503 and MT2505), (MT2502, MT2504 and MT2505), (MT2502, MT2504 and MT2508), (MT2503, MT2506 and MT2507) or (MT2504, MT2505 and MT2508) passed at grades of 11 or better.
Third Year (Chemistry):	20 credits: CH3441; 60 credits in six of: CH3431, CH3514, CH3512, CH3521, CH3615, CH3621, CH3712, CH3715, CH3717, CH3721;
Fourth Year (Chemistry):	50 credits: CH4442; 20 credits in two of: CH4514, CH4515, CH4612, CH4614, CH4615, , CH4715, CH4716, CH4717;
Third and Fourth Years (Maths) (for those who entered Honours in 2014/5 or earlier):	30 credits in two of: MT3501, MT3503, MT3504; 15 credits: MT3600 or MT3601;
Third and Fourth Years (Maths) (for those entering Honours in 2015/6 or later):	45 credits in three of: MT3501 - MT3508;
Third and Fourth Years (Maths) (for all students, regardless of the year of entry to Honours):	45 further credits: MT3000 - MT4598, MT4600 - MT4999.
Fifth Year:	90 credits: CH5441 and CH5711 and CH5713 and CH5714 and CH5715; 30 credits in three of: CH5511, CH5516 - CH5518, CH5611 - CH5616, CH5717.

Chemistry with Medicinal Chemistry – Integrated Masters MChem

First Year:	60 credits: CH1401 and CH1402 and CH1601.
Second Year:	90 credits: CH2501 and (CH2601 or CH2603) and CH2701 - with an average of grade 11 or better in all and an average of 15 or better in any two.
Third Year:	120 credits: CH3431 and CH3441 and CH3514 and CH3512 and CH3521 and CH3612 and CH3613 and CH3615 and CH3621 and CH3716 and CH3721.
Fourth Year:	120 credits: CH4442 and CH4514 and CH4515 and CH4612 and CH4614 and CH4615 and CH4716 and CH5612.
Fifth Year:	110 credits: CH5441 and CH5461 and CH5511 and CH5611 and CH5613 and CH5614 and CH5616. 10 credits in one of: CH5516, CH5517, CH5518.

Chemistry with Medicinal Chemistry – Integrated Masters MChem	
Direct entry to second year for approved candidates with 120 advanced standing credits	
Second Year:	10 credits: CH1202; 90 credits: CH2501 and (CH2601 or CH2603) and CH2701 - with an average of grade 11 or better in all and an average of 15 or better in any two.
Third Year:	120 credits: CH3431 and CH3441 and CH3514 and CH3512 and CH3521 and CH3612 and CH3613 and CH3615 and CH3621 and CH3716 and CH3721.
Fourth Year:	120 credits: CH4442 and CH4514 and CH4515 and CH4612 and CH4614 and CH4615 and CH4716 and CH5612.
Fifth Year:	110 credits: CH5441 and CH5461 and CH5511 and CH5611 and CH5613 and CH5614 and CH5616. 10 credits in one of: CH5516, CH5517, CH5518.

Chemistry with Medicinal Chemistry and External Placement – Integrated Masters MChem	
First Year:	60 credits: CH1401 and CH1402 and CH1601.
Second Year:	90 credits: CH2501 and (CH2601 or CH2603) and CH2701 - with an average of grade 11 or better in all and an average of 15 or better in any two.
Third Year:	120 credits: CH3431 and CH3441 and CH3514 and CH3512 and CH3521 and CH3612 and CH3613 and CH3615 and CH3621 and CH3716 and CH3721.
Fourth Year:	120 credits: CH4441 and CH4455 and CH4456 and CH4458
Fifth Year:	120 credits: CH5441 and CH5461 and CH5511 and CH5611 and CH5612 and CH5613 and CH5614 and CH5616.

Chemistry with Medicinal Chemistry and External Placement – Integrated Masters MChem	
Direct entry to second year for approved candidates with 120 advanced standing credits	
Second Year:	10 credits: CH1202; 90 credits: CH2501 and (CH2601 or CH2603) and CH2701 - with an average of grade 11 or better in all and an average of 15 or better in any two.
Third Year:	120 credits: CH3431 and CH3441 and CH3514 and CH3512 and CH3521 and CH3612 and CH3613 and CH3615 and CH3621 and CH3716 and CH3721.
Fourth Year:	120 credits: CH4441 and CH4455 and CH4456 and CH4458.
Fifth Year:	120 credits: CH5441 and CH5461 and CH5511 and CH5611 and CH5612 and CH5613 and CH5614 and CH5616.

Chemistry - Programme Requirements - 2016/7 - August 2016

Chemistry and Physics – Joint Integrated Masters MSci

First Year:	100 credits: CH1401 and CH1402 and MT1002 and PH1011 and PH1012. <i>(Students without pre-requisite for MT1002 will take MT1001 in Semester 1.)</i> <i>(Permission may be granted for suitably-qualified students to be exempted from PH1011 and/or PH1012 and to take some 2000-level PH credits in First Year, thus reducing the credit load in second year towards 120.)</i>
Second Year:	60 credits: CH2501 and CH2701 - with an average of grade 15 or better. 90 credits: MT2501 and MT2503) and PH2011 and PH2012 - with passes at grade 15 or better in all.
Third or Fourth Year* (Chemistry):	120 credits: CH3431 and CH3441 and CH3512 and CH3514 and CH3615 and CH3712 and CH3717 and CH3721 and CH4715 and CH4716 and CH4717.
Third or Fourth Year* (Physics):	120 credits: PH3007 and PH3012 and PH3061 and PH3062 and PH3082 and PH3101 and PH4039 and PH4041 and PH4043.
Fifth Year:	EITHER 60 credits: PH5101; 15 further credits in one of: PH5000 - PH5999; 30 credits in three of: CH5518, CH5711 - CH5715, CH5717; 15 further credits: CH5000 - CH5999, PH5000 - PH5999. or 50 credits from CH5441; 30 credits: PH5000 - PH5999; 30 credits: CH5518, CH5711 - CH5715, CH5717; 10 further credits: CH5000 - CH5999, PH5000 - PH5999.
* Normally students will take the Chemistry modules in Third Year and the Physics modules in Fourth Year; students should take advice from the two Schools.	
Other information: This course does not have RSC accreditation, but does have IOP accreditation.	

Materials Chemistry – Integrated Masters MChem

First Year:	60 credits: CH1401 and CH1402 and CH1601
Second Year:	90 credits: CH2501 and (CH2601 or CH2603) and CH2701 - with an average of grade 11 or better in all and an average of 15 or better in any two.
Third Year:	120 credits: CH3431 and CH3441 and CH3513 and CH3514 and CH3521 and CH3615 and CH3622 and CH3712 and CH3715 and CH3717 and CH3721.
Fourth Year:	110 credits: CH4442 and CH4453 and CH4514 and CH4515 and CH4715 and CH4716 and CH4717 and 10 credits in either CH5711 or CH5713;
Fifth Year:	90 credits: CH5441 and CH5461 and CH5715 and CH5716 and CH5717; 30 credits in three of: CH5511, CH5516 - CH5518, and either CH5711 or CH5713 (depending on module taken in fourth year), and CH5714.

Materials Chemistry – Integrated Masters MChem	
Direct entry to second year for approved candidates with 120 advanced standing credits	
Second Year:	10 credits: CH1202; 90 credits: CH2501 and (CH2601 or CH2603) and CH2701 - with an average of grade 11 or better in all and an average of 15 or better in any two.
Third Year:	120 credits: CH3431 and CH3441 and CH3513 and CH3514 and CH3521 and CH3615 and CH3622 and CH3712 and CH3715 and CH3717 and CH3721.
Fourth Year:	110 credits: CH4442 and CH4453 and CH4514 and CH4515 and CH4715 and CH4716 and CH4717 and 10 credits in either CH5711 or CH5713;
Fifth Year:	90 credits: CH5441 and CH5461 and CH5715 and CH5716 and CH5717; 30 credits in three of: CH5511, CH5516 - CH5518, and either CH5711 or CH5713 (depending on module taken in fourth year), CH5714.

Materials Chemistry with External Placement – Integrated Masters MChem	
First Year:	60 credits: CH1401 and CH1402 and CH1601.
Second Year:	90 credits: CH2501 and (CH2601 or CH2603) and CH2701 - with an average of grade 11 or better in all and an average of 15 or better in any two.
Third Year:	120 credits: CH3431 and CH3441 and CH3513 and CH3514 and CH3521 and CH3615 and CH3622 and CH3712 and CH3715 and CH3717 and CH3721.
Fourth Year:	120 credits: CH4441 and CH4453 and CH4455 and CH4458.
Fifth Year:	90 credits: CH5441 and CH5461 and CH5715 and CH5716 and CH5717; 30 credits in three of: CH5511, CH5516, CH5517, CH5518, CH5711, CH5713, CH5714.

Materials Chemistry with External Placement – Integrated Masters MChem	
Direct entry to second year for approved candidates with 120 advanced standing credits	
Second Year:	10 credits: CH1202; 90 credits: CH2501 and (CH2601 or CH2603) and CH2701 - with an average of grade 11 or better in all and an average of 15 or better in any two.
Third Year:	120 credits: CH3431 and CH3441 and CH3513 and CH3514 and CH3521 and CH3615 and CH3622 and CH3712 and CH3715 and CH3717 and CH3721.
Fourth Year:	120 credits: CH4441 and CH4453 and CH4455 and CH4458.
Fifth Year:	90 credits: CH5441 and CH5461 and CH5715 and CH5716 and CH5717; 30 credits in three of: CH5511, CH5516, CH5517, CH5518, CH5711, CH5713, CH5714.

Students still completing degree programmes as defined in previous Course Catalogues should discuss their module selections with their Honours Adviser(s).

