**University of Huddersfield**

**Programme Specification**

## *This document does not form part of the student contract*

|  |  |  |
| --- | --- | --- |
| **1.** | **Awarding institution** | University of Huddersfield |
| **2.** | **Teaching institution** | University of Huddersfield |
| **3.** | **School and Department** | School of Applied Sciences  Department of Chemical Sciences |
| **4.** | **Course accredited by** | Programme accredited at BSc level by the Royal Society of Chemistry (2013) |
| **5.** | **Mode of Delivery** | Full time and part time |
| **6.** | **Final Award** | Bachelor of Science with Honours (BSc(Hons)) |
| **7.** | **Course Title** | BSc(Hons) Chemistry\*  (options in Chemical Engineering, Medicinal Chemistry, Forensic Science or Analytical Chemistry)  BSc(Hons) Chemistry with Chemical Engineering\*  BSc(Hons) Chemistry with Forensic Science  BSc(Hons) Chemistry with Environmental Science  (\*also available part time) |
| **8.** | **UCAS Code** | F100 - BSc/C - Chemistry  F1H8 - BSc/CEC - with Chemical Engineering  F1F4 - BSc/CFS - with Forensic Science  XXX - BSc/CES - with Environmental Science |
| **9.** | **Subject benchmark statement** | QAA Chemistry Benchmark 2007 |
| **10.** | **Date of Programme Specification Approval** | January 2014  Revised: July 2018  Revised: February 2020 |

**11. Educational Aims of the Courses**

The chemical industry is one of the most important industrial sectors in the UK. There has always been a high demand for qualified chemistry graduates to work in the major petroleum and pharmaceutical companies. Increasing awareness of the environment and increasing legislation to control the degree of pollution has also lead to a greater demand for analytical chemists. Chemistry graduates are also employed as Forensic Scientists.

Chemistry graduates, as well as being knowledgeable about their own subject have also been trained in other transferable skills permitting them to proceed into other careers, including teaching, accountancy, sales, etc.

A BSc(Hons) degree has been offered at the University of Huddersfield for over 40 years and the Department of Chemical Sciences and Department of Biological and Geographical Sciences have staff expertise in the four main branches of chemistry (inorganic, organic, physical and analytical) as well as other related areas such as biochemistry, medicinal chemistry, chemical engineering, forensic science and environmental science. There are several large research groups within the department in topical areas, including catalysis, organic and inorganic synthesis, medicinal chemistry and analytical chemistry. Students are encouraged to study an option as this allows them to have specialised knowledge in a particular related topic which will ultimately improve their employment prospects.

*The main aims of the programme are to:*

1. instil into students a sense of enthusiasm for chemistry and an appreciation of the importance of chemistry;
2. provide a knowledge in the main branches of chemistry (inorganic, organic, physical and analytical);
3. provide training in the safe and competent use of laboratory equipment;
4. develop in students an ability to apply their chemical knowledge and skills to the solution of theoretical and practical problems in chemistry;
5. develop, through an education in chemistry, a range of transferable skills, including mathematical and IT skills, of value in chemical and non-chemical employment;
6. provide specialised knowledge in a chosen optional subject – chemical engineering, forensic science, medicinal chemistry, analytical chemistry or environmental science.

**12. Intended Learning Outcomes**

On completion of the course: students will:

|  |
| --- |
| ***Knowledge and Understanding*** |
| 1. have a basic knowledge of the four main branches of chemistry (inorganic, organic, physical and analytical) and [for BSc (Hons) Chemistry with Forensic Science] Forensic Science, or [for BSc (Hons) Chemistry with Chemical Engineering] Chemical Engineering or [for BSc (Hons) Chemistry with Environmental Science] Environmental Science. 2. have a basic understanding of the mathematical principles and computing skills related to their application in chemistry. 3. have a deeper knowledge and understanding of certain aspects of chemistry. 4. have a knowledge of a chosen optional area – Medicinal Chemistry, Analytical Chemistry, Forensic Science, Environmental Science or Chemical Engineering. 5. be aware of the most recent developments in any of the following, as appropriate to their course of study: chemistry, chemistry and forensic science, chemistry and environmental science and chemical engineering. 6. have acquired sufficient knowledge and personal awareness to be able to make an informed choice of future career. |

| ***Skills and Other Attributes*** |
| --- |
| 1. demonstrate knowledge of essential facts, concepts, principles and theories in the main areas of chemistry. 2. apply their knowledge to the solution of qualitative and quantitative problems of a familiar and unfamiliar nature. 3. evaluate, interpret and generate chemical information and data. 4. recognise and implement good measurement science and practice. 5. present scientific results and conclusions clearly and correctly, in writing and orally, to a variety of audiences. 6. use computers for data processing and retrieving chemical information. 7. recognise and analyse novel problems and plan strategies for their solution. |

| ***Professional Practical Skills*** |
| --- |
| 1. handle chemicals and carry out standard laboratory synthetic procedures safely. 2. operate standard chemical instrumentation. 3. monitor chemical properties, events or changes by the observation, measurement and systematic and reliable recording thereof. 4. interpret experimental results in terms of their significance and underlying theory. 5. carry out risk assessments on chemical procedures and laboratory procedures. 6. plan, design and execute practical investigations from the problem recognition stage through to the evaluation and appraisal of the results. |

| ***Transferrable/Key Skills*** |
| --- |
| 1. interpersonal skills, including the ability to work as part of a team. 2. numeracy and computational skills. 3. verbal and written communication skills. 4. time management and organisational skills. 5. information retrieval skills, including on-line searches. 6. study skills for continuing personal development. |

**13. Course Structures and Requirements, Levels, Modules, Credits and Awards**

**13.1** The course is consistent with the University Credit Accumulation and Transfer Scheme (CATS) where modules are predominantly of 20 credits, delivered and assessed over one year. In the first year, modules are at foundation level (“F” level credits) and provide underpinning knowledge, competencies and skills for the later intermediate and honours level modules (“I” and “H” level credits, respectively) taken in later years. Students are required to take 120 “F” level credits in the first year, 120 “I” level credits in the second year and 120 “H” level credits in the final year. Students may take an optional placement in the third year. Students wishing to receive the named degree in BSc(Hons) Chemistry with Forensic Science or BSc(Hons) Chemistry with Environmental Science or BSc(Hons) Chemistry with Chemical Engineering must study two specialist option modules per year. Under BSc(Hons) Chemistry options can also be chosen in Analytical Science, Environmental Science, Chemical Engineering and Medicinal Chemistry.

Year 1 - The first year modules cover fundamental inorganic, organic, physical and analytical chemistry. The lectures and seminars are supplemented with relevant practical exercises. These modules are supported by others which are intended to aid the understanding, manipulation, analysis and presentation of chemical and other scientific data. Basic IT and communication skills are introduced. Students studying the named BSc(Hons) Chemistry with Forensic Science will undertake forensic practical exercises and data handling more specific to the study of forensic science (for example, more statistics, forensic computing). Students studying the named BSc(Hons) Chemistry with Chemical Engineering will undertake practical exercises aimed at chemical engineers and data handling more specific to the study of chemical engineering (more advanced mathematics). Students studying the named BSc(Hons) Chemistry with Environmental Science will undertake two environmental science modules in place of data handling and practical chemistry.

**Year 1 Full Time - Foundation Level**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Level** | **Module Code** | **Module Title** | **Credits** | **Module Type** |
|  |  |  |  |  |
| F (FHEQ 4) | SFC1001 | Inorganic Chemistry 1 | 20 | Core |
| F (FHEQ 4) | SFC1003 | Physical Chemistry 1 | 20 | Core |
| F (FHEQ 4) | SFC1004 | Analytical Science 1 | 20 | Core |
| F (FHEQ 4) | SFC1002 | Organic Chemistry | 20 | Core |
|  | *Either* |  |  |  |
| F (FHEQ 4) | SFC1005 | Data Handling | 20 | Optional |
| F (FHEQ 4**)** | SFC1006 | Techniques of Practical Chemistry | 20 | Compulsory\* |
|  | *or* |  |  |  |
| F (FHEQ 4) | SFC1014 | Data Handling for Forensic Science | 20 | *Core for students taking Chemistry*  *with Forensic Science* |
| F (FHEQ 4) | SFC1007 | Practical Forensic Science 1 | 20 |
|  | *or* |  |  |  |
| F (FHEQ 4) | SFC1015 | Computing and Mathematics for Chemical Engineering | 20 | *Core for students taking Chemistry*  *with Chemical Engineering*  *Compulsory\* for students taking Chemistry with Chemical Engineering* |
| F (FHEQ 4) | SFC1016 | Laboratory Skills for Chemical Engineering 1 | 20 |
|  | *or* | | | |
| F (FHEQ 4) | SFG1012 | Dynamic Living Systems | 20 | *Core for students taking Chemistry*  *with Environmental Science* |
| F (FHEQ 4) | SFG1015 | Global Earth Cycles | 20 |

SFC1006 Techniques of Practical Chemistry is a pre-requisite for SIC2006 Practical Chemistry.

SFC1016 Laboratory Skills for Chemical Engineering 1 is a pre-requisite for SIC2016 Laboratory Skills for Chemical Engineering 2

Year 2 - Some of the modules build on the concepts introduced in the first year. There is also the opportunity for students to study a module in an additional optional area. Students studying the named degree BSc(Hons) Chemistry with Forensic Science will undertake forensic practical exercises plus Crime Scene Investigation. Students studying the named BSc(Hons) Chemistry with Chemical Engineering will undertake practical exercises aimed at chemical engineers plus Chemical Engineering 1. Those wishing to specialise in medicinal chemistry should study the modern biology option. Students studying the named degree BSc(Hons) Chemistry with Environmental Science will undertake two specialist environmental science modules.

**Year 2 Full Time - Intermediate Level**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Level** | **Module Code** | **Module Title** | **Credits** | **Module Type** |
|  |  |  |  |  |
| I (FHEQ 5) | SIC2001 | Inorganic Chemistry 2 | 20 | Core |
| I (FHEQ 5) | SIC2002 | Organic Chemistry 2 | 20 | Compulsory\* |
| I (FHEQ 5) | SIC2003 | Physical Chemistry 2 | 20 | Compulsory\* |
| I (FHEQ 5) | SIC2004 | Analytical Science 2 | 20 | Core |
|  | *Either* |  |  |  |
| I (FHEQ 5) | SIC2006 | Practical Chemistry PLUS OPTION 1 | 20 | Compulsory\* |
|  | *or* |  |  |  |
| I (FHEQ 5)  I (FHEQ 5) | SIC2007  SIC2010 | Practical Forensic Science 2 Crime Scene Investigation | 20  20 | *Core for students taking Chemistry with Forensic Science* |
|  | *or* |  |  |  |
| I (FHEQ 5)  I (FHEQ 5) | SIC2011  SIC2016 | Chemical Engineering 1  Laboratory Skills for Chemical Engineering 2 | 20  20 | *Core for students taking Chemistry with Chemical Engineering*  *Compulsory\* for students taking Chemistry with Chemical Engineering* |
|  | *or* |  |  |  |
| I (FHEQ 5) | SIG2012 | Ecological Adaption and Conservation Management | 20 | *Core for students taking Chemistry with Environmental Science* |
| I (FHEQ 5) | SIG2015 | Anthropocene | 20 |

**\*Compulsory modules cannot be condoned**

SIC2006 Practical Chemistry [BSc(Hons) Chemistry] and SIC2016 Laboratory Skills for Chemical Engineering 2 [BSc(Hons) Chemistry with Chemical Engineering] are pre-requisites for SHC4006 Advanced Chemistry Practical.

Year 3 - Supervised Work Experience is a one-year placement in a commercial company, governmental organisation, research establishment or hospital setting. This is an important part of the BSc(Hons) course which all students would normally be expected to undertake as they are an invaluable learning opportunity, providing an excellent platform from which to seek employment. Students are provided with support and advice in finding and applying for a position from the SWE tutor and the teaching team. Progress is followed and monitored throughout the year in the form of visits by the University Supervisor to the host institution to meet and discuss progress with the student and Workplace Supervisor.

Year 4 - The final year taught modules cover more advanced aspects of chemistry. An advanced practical module and a research project allow the student to work independently, but with guidance, on specific problems, which enables them to develop their own line of investigation. Students on the BSc(Hons) Chemistry route will study one further optional module in their chosen option. Students studying the named degree BSc(Hons) Chemistry with Forensic Science will undertake modules in Forensic Investigation plus Forensic Science and the Law. Students studying the named degree BSc(Hons) Chemistry with Chemical Engineering will study the advanced optional modules Chemical Engineering 2 and 3. Students studying the named degree BSc(Hons) Chemistry with Environmental Science will undertake two H level Environmental Science modules together with the research project, Analytical 3, Organic Chemistry 3 and either Physical Chemistry 3 or Inorganic Chemistry 3.

**BSc Chemistry Final Year - Honours Level**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Level** | **Module Code** | **Module Title** | **Credits** | **Module Type** |
|  |  |  |  |  |
| H (FHEQ 6) | SHC4002 | Organic Chemistry 3 | 20 | Core |
| H (FHEQ 6) | SHC4003 | Interfaces, Materials and Catalysis | 20 | Core |
| H (FHEQ 6) | SHC4006 | Advanced Chemistry Practical | 20 | Core |
| H (FHEQ 6) | SHC4019 | Chemistry Project | 20 | Core |
| H (FHEQ 6) | SHC4001 | Inorganic Chemistry 3 | 20 | Core |
|  | *(see below)* | OPTION 2 | 20 | Optional |

**Options BSc Chemistry**

**Chemistry**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Module Code** | **Module Title** | **Credits** |
| OPTION 1 (Year 2) | SIC2021  *or*  SIC2011 | Essential Biology  Chemical Engineering 1 | 20  20 |
| OPTION 2 (Final year) | SHC4004  *or*  SHC4011 | Analytical Chemistry 3  Chemical Engineering 2 | 20  20 |
| or  SHC4014 | Analytical Chemistry 4 | 20 |
| or  SHC4012 | Chemical Engineering 3 | 20 |
| or  SHC4031 | Molecular Targets and Drug Design | 20 |
| or  SHC4016  or  SHC4037 | Chemical Therapeutics  Sustainable Industrial Systems | 20  20 |

**BSc(Hons) Chemistry with Chemical Engineering Final Year - Honours Level**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Level** | **Module Code** | **Module Title** | **Credits** | **Module Type** |
| H (FHEQ 6) | SHC4002 | Organic Chemistry 3 | 20 | Core |
| H (FHEQ 6) | SHC4003 | Interfaces, Materials and Catalysis | 20 | Core |
| H (FHEQ 6) | SHC4006 | Advanced Chemistry Practical | 20 | Core |
| H (FHEQ 6) | SHC4019 | Chemistry Project | 20 | Core |
| H (FHEQ 6) | SHC4011 | Chemical Engineering 2 | 20 | Core |
| H (FHEQ 6) | SHC4012 | Chemical Engineering 3 | 20 | Core |

**BSc(Hons) Chemistry with Forensic Science Final Year - Honours Level**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Level** | **Module Code** | **Module Title** | **Credits** | **Module Type** |
| H (FHEQ 6) | SHC4002 | Organic Chemistry 3 | 20 | Core |
| H (FHEQ 6) | SHC4003 | Interfaces, Materials and Catalysis | 20 | Core |
| H (FHEQ 6) | SHC4006 | Advanced Chemistry Practical | 20 | Core |
| H (FHEQ 6) | SHC4019 | Chemistry Project | 20 | Core |
|  |  |  |  |  |
|  | Choose two of the following four options: | | | |
| H (FHEQ 6) | SHC4004 | Analytical Science | 20 | Optional |
| H (FHEQ 6) | SHC4007 | Advanced Crime Scene Sciences | 20 | Optional |
| H (FHEQ 6) | SHC4010 | Advanced Forensic Biology and Toxicology | 20 | Optional |
| H (FHEQ 6) | SHC4013 | Forensic Science and the Law | 20 | Optional |

**BSc(Hons) Chemistry with Environmental Science Final Year - Honours Level**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Level** | **Module Code** | **Module Title** | **Credits** | **Module Type** |
| H (FHEQ 6) | SHC4002 | Organic Chemistry 3 | 20 | Core |
| H (FHEQ 6) | SHC4004 | Analytical Science 3 | 20 | Core |
| H (FHEQ 6) | SHC4019 | Chemistry Project | 20 | Core |
| H (FHEQ 6) | SGH4021 | Soil Contamination and Ecological Restoration | 20 | Core |
| H (FHEQ 6) |  |  |  |
|  | Choose one of the following four options: | | | |
| H (FHEQ 6) | SHC4001 | Inorganic Chemistry 3 | 20 | Core |
| H (FHEQ 6) | SHC4003 | Physical Chemistry 3 | 20 | Core |

**BSc(Hons)** in Chemistry, Chemistry with Forensic Science, Chemistry with Environmental Science or Chemistry with Chemical Engineering can be awarded upon successful completion of modules which give the student 360 credits of which no more than 120 must be at Foundation level, and at least 120 must be at Honours level. To obtain an Honours award a student shall also normally have undertaken andpassed at first attempt, a project or dissertation on a suitable academic subject worth 20 credits and 60 credits of other final stage modules. Students must normally have achieved 120 credits to progress to the relevant next stage each year.

At Honours level a student should be able to demonstrate an ability to engage in effective literature research; to analyse specific problems or issues; critically evaluate/appraise using given criteria and to formulate original ideas or innovative proposals.

The class of award is determined at the Course Assessment Board in accordance with the University Regulations for awards. Honours classification will be determined from an average of the marks obtained from the best five modules at each of I and H level. Those marks obtained from the final year H level modules shall have twice the weighting of those obtained from the second year I level modules (penultimate stage).

The aggregate percentage mark and the relevant classification will be as follows:

70 - 100 First Class

60 - 69 Upper Second Class

50 - 59 Lower Second Class

40 - 49 Third Class

< 40 Fail

Students who are unable or do not wish to complete the Honours programme are able to gain intermediate awards determined by the number and type of credits as follows:

**13.2** **Interim Awards**

**Certificate of Higher Education**  120 “F” credits

**Diploma of Higher Education** 120 “F” credits + 120 “I” credits

**BSc** 120 “F” credits + 180 “I”/”H” credits (at least 60 “H” credits)

**14. Teaching, Learning and Assessment**

**14.1** Modules are delivered over two terms with normally two hours formal contact per week per module. Practical sessions are normally 3 or 4 hours. A variety of teaching methods are used, including lectures, tutorials, seminars, practicals and directed reading. Brightspace is widely used for the provision or supporting material. Individual student centred learning is achieved by the use of structured assignments, workbooks for practicals and IT based resources.

Most modules are assessed through coursework (during the year) and a formal unseen examination in the third term. Coursework is made up mainly from laboratory reports, problem solving assignments and short tests, including MCQs, as well as a small number of essays, oral and poster presentations. Formative tests are widely used, especially in the first year. A summary of assessment is given in appendix 4. A schedule is given to all students at the start of the academic year.

**15. Support for Students and their Learning**

**15.1** Support for students undertaking the courses operates at University, School and Course level as follows:

**15.2 University Level**

Central to the provision of student support are **Student Services**. The range of services they offer include:

**15.2.1** **Wellbeing and Disability Services**

* [Back on Track](http://www.hud.ac.uk/wellbeing/back-on-track/)
* [Disability Services](http://www.hud.ac.uk/disability-services/)
* [Drop in (Counselling and Wellbeing)](http://www.hud.ac.uk/wellbeing/)
* [The Faith Centre](https://students.hud.ac.uk/help/faith/)
* [Student parents](https://students.hud.ac.uk/help/wellbeing/student-parents/)
* [Student wellbeing](http://www.hud.ac.uk/wellbeing/)
* [University Health Centre](https://universityhealthhuddersfield.co.uk/)
* Big White Wall

More information on the range of student services can be found on their website at: <http://students.hud.ac.uk/wellbeing-disability-services/disabilityservices>

**15.2.2 Careers and Employability Service**

* [Careers and Employability Support](https://students.hud.ac.uk/opportunities/careers/) including Jobshop

**15.2.3** **The Student Finance Office** provides:

* Information and guidance regarding possible sources of funding for all courses in the University.
* Budgeting advice to discuss a variety of options and strategies in order to manage on a budget.
* Facilities for the billing and payment of income to be collected by the University.
* Debt advice via personal and confidential sessions is available from trained staff along with mediation and resolution.

Further information can be found on their website at: <http://www.hud.ac.uk/students/finance>

**15.2.3** **Computing services** provide induction and ongoing support for all students. More information on the range of computing services can be found on their website at:

<http://students.hud.ac.uk/it/>

**15.2.4 The Library** **(library and computing facilities)** provide induction and ongoing support for all students. More information on the range of library services can be found on their website at: <http://www.hud.ac.uk/library/>

**15.2.5** [**Students’ Union**](https://www.huddersfield.su/)

**15.2.6** [**International Office**](https://www.hud.ac.uk/international/)provides help and support for all overseas students

**15.2.7** [**Accommodation**](https://www.hud.ac.uk/uni-life/accommodation/)

**15.2.8** [**Sports facilities**](https://sport.hud.ac.uk/)

**15.3 School Level**

The School of Applied Science provides additional student support using a variety of approaches:

* + 1. **Personal Academic Tutor (PAT)** assigned to all students; of primary importance in providing support, often the main point of contact. Students are encouraged to see their PAT about any problems they have which do or may affect their ability to study and learn. Serious on-going issues are kept on track and student confidentiality is respected.
    2. **Induction week**
    3. **Support and Guidance Officers** work with the University Student Support systems to provide pastoral support as required.
    4. **School Student Support Office** (Room JPGS/25) for course enquiries.
    5. **Academic Skills tutors** can give one to one support to students requiring help with study skills.

**15.3.6** Student attendance is monitored in accordance with the University regulations.

* 1. **Course Level**

At course level support is provided by:

* + 1. **Year Tutor** - of primary importance in supporting students, often fulfills many of the roles of the PAT and often the main point of contact. Students are encouraged to see their Year Tutor about any problems they have which do or may affect their ability to study and learn. Serious on-going issues are kept on track and student confidentiality is respected.
    2. **Academic tutors** - students are encouraged to see academic tutors if they have difficulty understanding material or with coursework.
    3. **Course Handbook**
    4. **Module Handbook**
    5. [Brightspace](https://brightspace.hud.ac.uk/d2l/login) virtual learning environment.
    6. Specialised computing laboratories and chemical/forensic science laboratories
    7. Student e-mail and access to teaching staff including the Head of Department and the Course Leader.

**15.4.8** Supervised Work Experience (SWE) Students who take the optional SWE year are supported by the SWE Tutor and the Placement and Outreach Administrator. Guidance in the preparation of CVs, letters of application and interview techniques is available. Students are supervised by visits during the placement period.

**16. Criteria for Admission**

The admission of an individual applicant is subject to:

* a reasonable expectation that the applicant will be able to fulfil the learning outcomes of the course and achieve the standard required for the award;
* the general requirements for the award to which the course leads;
* the regulations for the particular course of study, which will describe the knowledge and skills required for admission;
* evidence of personal, professional and educational experiences that provide indications of ability to meet the demands of the course.
* the normal expectation that the applicant will be at least 18 years of age by 30 September in the academic year of entry.

16.1 The University of Huddersfield seeks and encourages applicants in order to widen participation, improve access and apply the principles of equal opportunities. We provide support for applicants who require additional assistance in order to select the right course of study and make a successful transition to studying at University. We encourage local, national and international applications. Further information for International Students can be found on: <http://www.hud.ac.uk/international>

For those students educated outside the UK, there is a requirement to have International English Language Testing System (IELTS) at a score of 6.0 with a minimum score of 6.0 in writing and a minimum of 5.5 in any single component. For students who have alternative qualifications or do not meet the IELTS requirement the University also offers a range of [Pre-Sessional English Programmes.](http://www.hud.ac.uk/international/pre-sessionalenglishprogramme/)

**16.2** The University provides opportunities for the accreditation of prior learning (APL) as stated at the following link: <https://www.hud.ac.uk/policies/registry/awards-taught/section-c/>

**16.3** The University’s general minimum entry requirements are specified in Section D of the Regulations for Awardswhich can be found on the University website as follows: <https://www.hud.ac.uk/policies/registry/awards-taught/section-d/>

**16.4** Every person who applies for this course and meets the minimum entry requirement – regardless of any disability – will be given the same opportunity in the selection process. General advice and information regarding disability and the support the University can give can be found by contacting student services as follows:

Telephone**:** 01484 472675

Email: [disability@hud.ac.uk](mailto:disability@hud.ac.uk)

Further information is available at their website at:

<http://students.hud.ac.uk/wellbeing-disability-services/disabilityservices>

Further advice on the specific skills and abilities needed to successfully undertake this course can be found by visiting the University website at <http://www.hud.ac.uk/courses/> and by contacting the admissions tutor.

* 1. The specific entry requirements and admission criteria for the courses are detailed below:

The admissions process will be in conjunction with other courses of the chemical sciences suite.

Normally candidates will be at least 18 years of age by 31st December of the year of entry.

For full-time and Sandwich Courses, it is desirable that candidates have GCE/GCSE Grade C/Grade 4 or above in English and Mathematics and an approved science subject.

For entry to the undergraduate degree candidates normally will have:

* Passes in 5 subjects at GCE/VCE/AVCE/GCSE including 12 units of study from 3, 6 and 12 unit awards with at least one 6 unit award in Chemistry or a 12 unit award in Science, *or*
* A BTEC Certificate/Diploma in science, *or*
* Successfully completed the University of Huddersfield Science Foundation Year*, or*
* Advanced, level 3, GNVQ or NVQ at an appropriate level, *or*
* Other qualifications deemed by the School to be acceptable.

Mature students, without formal qualifications may apply for admission through the School Accreditation of Prior Experiential Learning Panel.

Entry to different stages is possible for all Courses. At least 33% of the total credits for an award must be obtained through study at the University. Each course has identified requirements for entry at different points and stages. Accreditation is approved by the SAVP.

<https://www.hud.ac.uk/policies/registry/awards-taught/section-c/>.

**17. Methods for Evaluating and Improving the Quality and Standards of Teaching and Learning**

**17.1 University:** The methods for the validation and annual evaluation of courses, including those validated by external bodies, and for the review of teaching and research and of academic support services are specified in the University’s; Quality Assurance Procedures for Taught Courses and Research Awards which can be found on the University website as follows:

<https://www.hud.ac.uk/policies/registry/qa-procedures/>

**17.1.1 Periodic reviews**

**17.1.2 External examiner system**

**17.1.3 University Teaching and Learning Committee**

**17.1.4 Mechanisms for student feedback** (including independent student satisfaction survey)

**17.1.5 Institutional staff development courses**

**17.2 School:**

**17.2.1 Mechanisms for review and evaluation of teaching, learning, assessment, the curriculum and outcome standards**

* Course and module reviews (student evaluations and staff report)
* Annual course evaluation report prepared by the Course Leader and considered by Course Committee and School Annual Evaluation Committee
* Peer observation of teaching
* External Examiners' reports
* Employers' reports for SWE students
* PSRB requirements

**17.2.2 Committees with responsibility for monitoring and evaluating quality and standards**

* Student Panel
* Course Committee
* School of Applied Sciences Teaching and Learning Committee
* School of Applied Sciences Annual Evaluation Committee
* Course Assessment Board - meets in June and July to consider marks, progression and awards

**17.2.3 Mechanisms for gaining student feedback on the quality of teaching and their learning experience**

* Student representation on Course Committee
* Student evaluation of modules

**17.2.4 Staff development priorities include:**

* Staff Personal Development Review
* Updating professional developments
* Regular course meetings and annual review and planning for subsequent academic year.

**18. Regulation of Assessment**

**18.1** University awards are regulated by the Regulations for Awards on the University website as follows: <https://www.hud.ac.uk/policies/registry/awards-taught/> and the Regulations for Taught Students, procedures and forms can be accessed on the University website as follows:

<https://www.hud.ac.uk/registry/current-students/taughtstudents/>

The minimum pass mark for each module is 40%.

An overview of assessment details and procedures is provided in the Course Handbook and Appendix 4.

To qualify for the award of Honours students must be credited with 360 credits and complete all the requirements of the course. Only the marks from the second and third year will contribute to the final classification of degree.

The marks for each module are weighted according to the credit rating. Third year marks contribute two thirds of the overall performance.

Summary of grades, marks and their interpretation for honours degree classification

GRADE MARKS INTERPRETATION

A 70% + Outstanding (First Class)

B 60-69% Above average (Upper Second Class)

C 50-59% Average (Lower Second Class)

D 40-49% Satisfactory (Third Class)

E 30-39% Referable

F Below 30% Fail

G 0% Fail (non-submission of work)

**18.2 Role of External Examiners**

External Examiners are appointed by the University Learning and Teaching Committee.

Three External Examiners are appointed from the academic community with responsibility for the chemical sciences suite of courses. The role of the External Examiner is that of moderator. In order to do this they:

* approve examination papers
* review coursework and examination scripts
* interview borderline candidates for award
* attend the Course Assessment Board.

**19. Indicators of Quality and Standards**

* Reports of validation panels
* Annual course reviews
* External examiners’ reports
* Qualifications and experience of staff
* Report on University Review of Chemical Sciences 2013
* Recognition of BSc(Hons) suite of courses by RSC for accredited status (achieved in 2013)

**Please note: This specification provides a concise summary of the main features of the Programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module can be found in the study module guide and course handbook. The accuracy of the information contained in this document is reviewed by the University and may be checked by the Quality Assurance Agency for Higher Education.**

**Key sources of information about the course can be found in:**

Course Handbook (Issued yearly)

University of Huddersfield Student Handbook of Regulations (issued yearly)

Appendix 1. Staffing and Management

**MANAGEMENT OF PROGRAMMES**

The management structure for the BSc(Hons) Chemistry courses operates within the School of Applied Sciences Scheme and acts on behalf of this and other courses for which the Department of Chemical Sciences is responsible.

**Course Committee**

The Course will be under the overall management of the Course Committee which meets at least once per term and is responsible for any decisions concerning the suitability of modules for inclusion on the Course. The Chair of that Committee is the Course Leader. The Course Leader will implement policies and decisions of that committee and be responsible for the day to day running of the course. Feedback from student representatives is a standing item on the agenda.

**Year Tutors** are responsible to the Course Committee for the proper management and monitoring of each year of the Course. They will be responsible for advising students of their choice of modules and for support, guidance and counseling when appropriate. The final year tutor is responsible for the co-ordination and administration of the final year project. They will be responsible for allocating project supervisors to each student and will co-ordinate and oversee the assessment of the project.

**Module Leaders** will arrange and co-ordinate the teaching programme for the module(s) for which they are responsible, and maintain appropriate records. Module leaders meet on a regular basis with the teaching team involved in the delivery of the module and the year tutor. The module leader also seeks feedback from student representatives regarding the module.

**Personal Academic Tutors** are allocated to all first-year students by the first year tutor.

**Admissions Officer** is responsible, through the Course Leader, to the Course Committee for the proper processing of all applications for admission to the Course.

**Examination Officer** is responsible, on behalf of the Course Manager/Leader, for coordinating examination arrangements, including the setting and vetting of examination papers.

**SWE Tutor** is responsible for preparing students for placement, liaising with employers to secure placements and monitoring students while on SWE.

Appendix 2. Mapping of learning outcomes on to modules

**Year 1 Full Time - Foundation Level**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | CORE MODULES | | | | OPTIONAL MODULES | | | | | |
| Learning Outcome | SFC1001 | SFC1003 | SFC1004 | SFC1002 | SFC1006 | SFC1016 | SFC1007 | SFC1005 | SFC1014 | SFC1015 |
| 1 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |
| 2 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |  |
| 3 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |
| 4 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |
| 5 |  | ✔ |  |  |  |  |  | ✔ | ✔ | ✔ |
| 6 |  |  |  |  | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 7 | ✔ | ✔ | ✔ | ✔ |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  | ✔ | ✔ | ✔ |
| 9 |  |  |  |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  | ✔ |  | ✔ |  |
| 11 |  |  |  |  |  |  |  |  |  |  |
| 12 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |
| 13 | ✔ | ✔ | ✔ | ✔ |  |  |  |  |  |  |
| 14 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |
| 15 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |
| 16 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |
| 17 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |
| 18 |  | ✔ | ✔ |  | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 19 |  |  |  |  |  |  |  |  |  |  |
| 20 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |
| 21 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |
| 22 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |
| 23 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |
| 24 |  |  |  |  |  |  |  |  |  |  |
| 25 |  |  |  |  |  |  |  |  |  |  |
| 26 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |
| 27 |  | ✔ |  |  |  |  |  | ✔ | ✔ | ✔ |
| 28 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |
| 29 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 30 |  |  |  |  |  |  |  | ✔ | ✔ | ✔ |
| 31 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

**Year 2 Full Time - Intermediate Level**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Core/Compulsory | | | | Optional | | | | | |
| Learning Outcome | SIC2001 | SIC2002  Compulsory | SIC2003  Compulsory | SIC2004 | SIC2006 | SIC2007 | SIC2010 | SIC2011 | SIC2021 | SIC2016 |
| 1 | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |  | ✔ |
| 2 | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |  | ✔ |
| 3 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  | ✔ | ✔ | ✔ |
| 4 | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |  | ✔ |
| 5 |  |  | ✔ | ✔ |  |  |  |  |  |  |
| 6 |  |  |  |  |  | ✔ | ✔ | ✔ | ✔ | ✔ |
| 7 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 8 |  |  |  |  |  |  |  | ✔ |  | ✔ |
| 9 | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |  | ✔ |
| 10 |  |  |  |  |  | ✔ | ✔ | ✔ | ✔ |  |
| 11 |  |  |  |  |  |  |  |  |  | ✔ |
| 12 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 13 | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |  | ✔ |
| 14 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  | ✔ |  | ✔ |
| 15 | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |  | ✔ |
| 16 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  | ✔ | ✔ | ✔ |
| 17 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 18 |  |  | ✔ | ✔ | ✔ | ✔ |  |  |  | ✔ |
| 19 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 20 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  | ✔ |
| 21 | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |  | ✔ |
| 22 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  | ✔ | ✔ | ✔ |
| 23 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  | ✔ | ✔ | ✔ |
| 24 |  |  |  |  | ✔ |  |  |  |  | ✔ |
| 25 |  |  |  |  | ✔ | ✔ |  |  |  | ✔ |
| 26 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  | ✔ | ✔ | ✔ |
| 27 |  |  | ✔ |  | ✔ | ✔ |  | ✔ |  | ✔ |
| 28 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 29 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 30 |  |  |  |  | ✔ |  | ✔ |  |  | ✔ |
| 31 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

**Final Year - Honours Level**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Core Modules | | | | | Option Modules | | | | | | | | | |
| Learning Outcome | SHC4002 | SHC4003 | SHC4006 | SHC4019 | SHC4001 | SHC4004 | SHC4014 | SHC4011 | SHC4012 | SHC4010 | SHC4013 | SHC4031 | SHC4016 | SHC4017 |
| 1 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |  | ✔ | ✔ | ✔ |
| 2 | ✔ | ✔ | ✔ |  | ✔ | ✔ | ✔ |  |  |  |  |  |  | ✔ |
| 3 |  |  | ✔ | ✔ |  |  |  | ✔ |  |  |  |  |  |  |
| 4 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |  | ✔ | ✔ | ✔ |
| 5 |  |  | ✔ | ✔ |  |  |  |  |  | ✔ | ✔ |  |  |  |
| 6 |  |  |  |  |  | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |
| 7 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 8 |  | ✔ |  |  |  |  |  | ✔ | ✔ |  |  |  |  |  |
| 9 | ✔ | ✔ |  |  | ✔ | ✔ | ✔ |  | ✔ | ✔ |  | ✔ | ✔ | ✔ |
| 10 |  |  |  |  |  | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |
| 11 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |  | ✔ | ✔ | ✔ |
| 12 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 13 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  |  |  | ✔ | ✔ | ✔ |
| 14 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 15 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  | ✔ | ✔ | ✔ |
| 16 |  |  | ✔ | ✔ |  |  |  | ✔ | ✔ |  |  |  |  |  |
| 17 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 18 |  |  | ✔ | ✔ |  |  |  |  |  |  |  |  |  |  |
| 19 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |  |  | ✔ | ✔ | ✔ |
| 20 |  |  | ✔ | ✔ |  |  |  |  |  |  |  |  |  |  |
| 21 |  |  | ✔ | ✔ |  |  |  |  |  |  |  |  |  |  |
| 22 |  |  | ✔ | ✔ |  |  |  | ✔ | ✔ |  |  |  |  |  |
| 23 |  |  | ✔ | ✔ |  |  |  | ✔ | ✔ |  |  |  |  |  |
| 24 |  |  |  | ✔ |  |  |  |  |  |  |  |  |  |  |
| 25 |  |  | ✔ | ✔ |  |  |  | ✔ | ✔ |  |  |  |  |  |
| 26 |  |  | ✔ | ✔ |  |  |  | ✔ | ✔ |  |  |  |  |  |
| 27 |  | ✔ | ✔ |  |  |  |  | ✔ | ✔ |  |  |  |  |  |
| 28 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 29 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 30 |  |  | ✔ | ✔ |  |  |  |  |  |  |  |  |  |  |
| 31 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

Appendix 3. Mapping of Learning Outcomes to Benchmark Statement

The learning outcomes can be divided into two areas - subject knowledge and ability. Since the subject knowledge benchmark statements are more detailed than our learning outcomes, the modules which fulfil each subject knowledge statement and learning outcome are listed below.

**SUBJECT KNOWLEDGE**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| LEARNING OUTCOME | | 7 | 8 | 9 | 10 | 11 | 12 |
| BENCHMARK STATEMENT |  |  |  |  |  |  |  |
| SK1 |  | SFC1001  SFC1003  SFC1002 |  |  |  |  |  |
| SK2 |  | SFC1001  SFC1002 |  |  |  |  |  |
| SK3 |  | SFC1004 |  | SIC2004 |  |  |  |
| SK4 |  |  |  | SIC2003  SHC4003 |  |  |  |
| SK5 |  | SFC1001  SFC1003 |  |  |  |  |  |
| SK6 |  | SFC1003 |  | SIC2003 |  |  |  |
| SK7 |  | SFC1003 |  | SHC4003 |  | SHC4003 |  |
| SK8 |  | SFC1003  SFC1004 |  | SIC2004  SHC4014 |  | SHC4014 |  |
| SK9 |  | SFC1001 |  |  |  |  |  |
| SK10 |  | SFC1002 |  | SIC2002  SHC4001  SHC4002 |  | SHC4001 SHC4002 |  |
| SK11 |  | SFC1002 |  | SIC2002 |  |  |  |
| SK12 |  | SFC1001  SFC1002 |  | SIC2002 |  |  |  |
| SK13 |  | SFC1002 |  | SIC2002 SHC4001  SHC4002  SHC4031  SHC4016 |  |  |  |
| SK14 |  | SFC1003 |  | SIC2003  SHC4003 |  | SHC4003 |  |
| SK15 |  |  |  |  |  | SHC4001 SHC4002  SHC4003  SHC4004  SHC4006  SHC4011  SHC4012  SHC4014  SHC4031  SHC4016  SHC4017  SHC4019 |  |

**CHEMISTRY-RELATED COGNITIVE ABILITIES AND SKILLS**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| LEARNING OUTCOME | | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| BENCHMARK STATEMENT |  |  |  |  |  |  |  |  |
| Aa1 |  | ✔ |  |  |  |  |  |  |
| Aa2 |  |  | ✔ |  |  |  |  |  |
| Aa3 |  |  |  |  |  |  |  | ✔ |
| Aa4 |  |  |  | ✔ |  |  |  |  |
| Aa5 |  |  |  |  | ✔ |  |  |  |
| Aa6 |  |  |  |  |  | ✔ |  |  |
| Aa7 |  |  |  |  |  |  | ✔ |  |

**CHEMISTRY-RELATED PRACTICAL SKILLS**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| LEARNING OUTCOME | | 20 | 21 | 22 | 23 | 24 | 25 |  |
| BENCHMARK STATEMENT |  |  |  |  |  |  |  |  |
| Ab1 |  | ✔ |  |  |  |  |  |  |
| Ab2 |  | ✔ |  |  |  |  |  |  |
| Ab3 |  |  |  | ✔ |  |  |  |  |
| Ab4 |  |  |  |  |  |  | ✔ |  |
| Ab5 |  |  | ✔ |  |  |  |  |  |
| Ab6 |  |  |  |  | ✔ |  |  |  |
| Ab7 |  |  |  |  |  | ✔ |  |  |

**TRANSFERABLE SKILLS**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| LEARNING OUTCOME | | 26 | 27 | 28 | 29 | 30 | 31 |  |
| BENCHMARK STATEMENT |  |  |  |  |  |  |  |  |
| Ac1 |  |  |  | ✔ |  |  |  |  |
| Ac2 |  |  |  |  |  |  |  | ✔ |
| Ac3 |  |  | ✔ |  |  |  |  |  |
| Ac4 |  |  | ✔ |  |  |  |  |  |
| Ac5 |  |  |  |  |  | ✔ |  |  |
| Ac6 |  | ✔ |  |  |  |  |  |  |
| Ac7 |  |  |  |  | ✔ |  |  |  |

Appendix 4. Assessment Strategies for modules

**YEAR ONE – FOUNDATION LEVEL MODULES**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Module**  **Code** | **Module**  **Title** | **Assessment Weighting** | | | **Assessment**  **Strategy** |
| **Exam** | **C/W** | |
| **practical** | **other** |
| *Core Modules* | | | | | |
| SFC1001 | Inorganic Chemistry 1 | 60 | 20 | 20 | 2 hr exam, lab reports, test and/or assignment |
| SFC1003 | Physical Chemistry 1 | 60 | 20 | 20 | 2 hr exam, lab reports, test and/or assignment |
| SFC1004 | Analytical Science 1 |  | 25 | 75 | lab reports, 2 tests (40%), assignment (35%) |
| SFC1002 | Organic Chemistry | 60 | 20 | 20 | 2 hr exam, lab reports, test and/or assignment |
| *Optional Modules* | | | | | |
| SFC1005 | Data Handling |  |  | 100 | 4 maths tests (1 formative) (50%), computing assignment (50%) |
| SFC1014 | Data Handling for Forensic Science |  |  | 100 | 3 maths tests (1 formative) (50%), 2 computing tests (50%) |
| SFC1015 | Computing and Mathematics for Chemical Engineering |  |  | 100 | 4 maths tests (1 formative) (50%), computing assignment3 (50%) |
| SFC1006 | Techniques of Practical Chemistry |  | 100 |  | Lab reports |
| SFC1007 | Practical Forensic Science 1 |  | 80 | 20 | Lab reports, oral presentation |
| SFC1016 | Laboratory Skills for Chemical Engineering 1 |  | 100 |  | Lab reports |

**YEAR TWO – INTERMEDIATE LEVEL MODULES**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Module** | **Module Title** | **Assessment Weighting** | | | **Assessment Strategy** |
| **Code** |  | **Exam** | **C/W** | |
|  |  |  | **practical** | **other** |  |
| *Core/Compulsory Modules* | | | | | |
| SIC2001 | Inorganic Chemistry 2 | 60 | 25 | 15 | 2.5 hr exam, lab reports, test or assignment |
| SIC2002  Compulsory | Organic Chemistry 2 | 70 | 20 | 10 | 2.5 hr exam, lab reports, test or assignment |
| SIC2003  Compulsory | Physical Chemistry 2 | 70 | 20 | 10 | 2.5 hr exam, lab reports, test or assignment |
| SIC2004 | Analytical Science 2 | 60 | 25 | 15 | 2.5 hr exam, lab reports, assignment |
| *Optional Modules* | | | | | |
| SIC2006 | Practical Chemistry |  | 100 |  | Lab reports |
| SIC2007 | Practical Forensic Science 2 |  | 75 | 25 | Lab reports, oral presentation |
| SIC2016 | Laboratory Skills for Chemical Engineering 1 |  | 100 |  | Lab reports |
| SIC2010 | Crime Scene Investigation |  |  | 100 | 2 assignments |
| SIC2011 | Chemical  Engineering 1 | 60 | 40 |  | 2.5 hr exam, lab reports |
| SIC2021 | Biology for the Chemical and Forensic Sciences | 60 | 40 |  | 2 hr exam, lab reports |

**YEAR THREE/FOUR – HONOURS LEVEL MODULES**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module**  **Code** | **Module**  **Title** | | | **Assessment Weighting** | | | | | | **Assessment**  **Strategy** |
| **Exam** | | | **C/W** | | |
| **practical** | | **other** |
| *Core Modules* | | | | | | | | | | |
| SHC4002 | Organic Chemistry 3 | 75 | | |  | | | 25 | | 3 hr exam, test or assignment |
| SHC4003 | Interfaces, Materials and Catalysis | 75 | | |  | | | 25 | | 3 hr exam, test or assignment |
| SHC4006 | Advanced Practical Chemistry |  | | | 100 | | |  | | Lab reports, oral/poster presentation |
| SHC4019 | Chemistry Project |  | | | 100 | | |  | | Project (35%), report (55%), oral presentation (10%) |
| SHC4001 | Inorganic Chemistry 3 | 75 | | |  | | | 25 | | 3 hr exam, test or assignment |
| *Optional Modules* | | | | | | | | | | |
| SHC4004 | Analytical Science 3 | | 75 | | |  | | 25 | | 3 hr exam, test or assignment |
| SHC4014 | Analytical science 4 | | 75 | | |  | | 25 | | 3 hr exam, test or assignment |
| SHC4010 | Advanced Forensic Biology and Toxicology | | 75 | | | 25 or 25  or in shared combination | | | | 3 hr exam, assignment and/or practical |
| SHC4013 | Forensic Science and the Law | |  | | |  | | 100 | | 2 assignments |
| SHC4011 | Chemical Engineering 2 | | 75 | | | 25 | |  | | 3 hr exam, lab reports |
| SHC4012 | Chemical Engineering 3 | | 75 | | | 25 | |  | | 3 hr exam, lab reports |
| SHC4031 | Molecular Targets and Drug Design | | 75 | | |  | | 25 | | 3 hr exam, assignment |
| SHC4016 | Chemical Therapeutics | | 75 | | |  | | 25 | | 3 hr exam, assignment |

Appendix 5. Course Assessment Board Structure

|  |  |  |  |
| --- | --- | --- | --- |
| Mode of Study | Course Start Month | Length before Main CAB | Expected Month for Main CAB |
| UGT FT | September | 9 months | June |