MSc, PG Dip and PG Cert
SURGICAL INNOVATION
Student Handbook 2016-2017
# MSc, PG Dip and PG Cert Surgical Innovation

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Part 1 - Overview

Welcome

Congratulations on choosing the MSc in Surgical Innovation at Imperial College London. We hope you will both enjoy the programme and find it gives you the knowledge and skills needed for your clinical and professional development.

This is a new course and, whilst we have put a good deal of thought into the design, we acknowledge that we may not get everything right. Therefore, your feedback is really important in order to improve the learning experience and ensure the programme offers the highest possible quality.

We wish you every success on this unique venture.

George Hanna & Fernando Bello
Programme Directors

George Hanna Ph.D. FRCS
Consultant Upper GI Surgeon and
Professor of Surgical Sciences
Programme Director

Dr Fernando Bello
Reader in Surgical Computing and Simulation Science
Programme Co-director

Mr Christopher Peters
Consultant Upper GI Surgeon and Clinical Senior Lecturer Programme Co-director
# Programme Personnel and Useful Contacts

Your first port of call for virtually all queries should be Susan Clark (Course Administrator). Please also note that you should expect to carry out all official business with the course and college via your Imperial email account. No exceptions!

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Position and Full Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Professor George Hanna</strong></td>
<td>Programme Director</td>
<td>Professor of Surgical Sciences and Head of Division Department of Surgery and Cancer Imperial College London Contact information: 10th Floor QEQM Building St Marys Hospital South Wharf Road London, W2 1BL Tel: +44 (0) 203 312 2125 Email: <a href="mailto:g.hanna@imperial.ac.uk">g.hanna@imperial.ac.uk</a> Web: <a href="http://www.imperial.ac.uk/people/g.hanna">http://www.imperial.ac.uk/people/g.hanna</a></td>
</tr>
<tr>
<td>Dr Fernando Bello</td>
<td>Programme Co-director Core Module 4 Leader</td>
<td>Reader in Surgical Computing &amp; Simulation Science Centre for Engagement and Simulation Science Department of Surgery and Cancer Contact Information: 3rd Floor Chelsea and Westminster Hospital (Academic Surgery) 369 Fulham Road London SW10 9NH Tel: +44 (0) 203 315 5468 Email: <a href="mailto:f.bello@imperial.ac.uk">f.bello@imperial.ac.uk</a> Web: <a href="http://www.imperial.ac.uk/people/f.bello">http://www.imperial.ac.uk/people/f.bello</a></td>
</tr>
<tr>
<td>Mr Christopher Peters</td>
<td></td>
<td>Clinical Senior Lecturer in Upper Gastrointestinal Department of Surgery and Cancer Imperial College London Contact information: 10th Floor QEQM Building St Marys Hospital South Wharf Road, London, W2 1BL Email: <a href="mailto:christopher.peters@imperial.ac.uk">christopher.peters@imperial.ac.uk</a></td>
</tr>
<tr>
<td>Prof Muntzer Mughal ChM FRCS</td>
<td>External Examiner</td>
<td>University College London</td>
</tr>
<tr>
<td>Susan Clark</td>
<td>Senior Postgraduate Course Administrator</td>
<td>Department of Surgery and Cancer Imperial College London Contact information: Clinical Skills Centre, 2nd Floor, Room 8 Paterson Wing, St Marys Campus Imperial College London South Wharf Road London, W2 1BL Tel: +44 (0) 203 312 7931 Email: <a href="mailto:s.clark@imperial.ac.uk">s.clark@imperial.ac.uk</a></td>
</tr>
<tr>
<td>Professor Vassilios Papalois</td>
<td>Module Lead Principles of Surgery</td>
<td>Consultant Transplant and General Surgeon Imperial College Health Care NHS Trust Directorate of Renal and Transplant Services 4th Floor Hammersmith House</td>
</tr>
<tr>
<td>Module Lead</td>
<td>Surgical Education</td>
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<tr>
<td>Dr Kirsten Dalrymple</td>
<td>Principal Teaching Fellow, Co-director MEd in Surgical Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department of Surgery and Cancer</td>
<td></td>
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<td></td>
<td>Imperial College London</td>
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<tr>
<td></td>
<td>Contact information:</td>
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<tr>
<td></td>
<td>Clinical Skills Centre, 2nd Floor, Room 8</td>
<td></td>
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<tr>
<td></td>
<td>Paterson Wing, St Marys Campus</td>
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<td></td>
<td>Imperial College London</td>
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<tr>
<td></td>
<td>South Wharf Road, London, W2 1BL</td>
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<tr>
<td></td>
<td>Tel: +44 (0) 203 312 7931</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:k.dalrymple@imperial.ac.uk">k.dalrymple@imperial.ac.uk</a></td>
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<table>
<thead>
<tr>
<th>Module Lead</th>
<th>Oesophago-gastric</th>
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<tbody>
<tr>
<td>Mr Krishna Moorthy</td>
<td>Clinical Senior Lecturer in Upper Gastrointestinal</td>
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<tr>
<td></td>
<td>Department of Surgery and Cancer</td>
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<tr>
<td></td>
<td>Imperial College London</td>
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<td></td>
<td>Contact information:</td>
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<tr>
<td></td>
<td>10th Floor QEQM Building</td>
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<tr>
<td></td>
<td>St Marys Hospital</td>
</tr>
<tr>
<td></td>
<td>South Wharf Road, London, W2 1BL</td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:k.moorthy@imperial.ac.uk">k.moorthy@imperial.ac.uk</a></td>
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</tbody>
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<table>
<thead>
<tr>
<th>Module Lead</th>
<th>Improving Safety, Implementing Change</th>
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</thead>
<tbody>
<tr>
<td>Dr Jonathan Benn</td>
<td>Lecturer in Quality Improvement in Healthcare</td>
</tr>
<tr>
<td></td>
<td>Dept of Surgery and Cancer</td>
</tr>
<tr>
<td></td>
<td>5th Floor, Medical School</td>
</tr>
<tr>
<td></td>
<td>St Mary's Campus</td>
</tr>
<tr>
<td></td>
<td>Norfolk Place, London, W2 1PG</td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:j.benn@imperial.ac.uk">j.benn@imperial.ac.uk</a></td>
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</tbody>
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<table>
<thead>
<tr>
<th>Module Lead</th>
<th>Orthopaedics</th>
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<tbody>
<tr>
<td>Mr Chinmay Gupte</td>
<td>Clinical Senior Lecturer in Musculoskeletal Science</td>
</tr>
<tr>
<td></td>
<td>Department of Surgery and Cancer</td>
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<tr>
<td></td>
<td>Imperial College London</td>
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<tr>
<td></td>
<td>Contact information:</td>
</tr>
<tr>
<td></td>
<td>Charing Cross Hospital 7 East wing</td>
</tr>
<tr>
<td></td>
<td>Charing Cross Campus</td>
</tr>
<tr>
<td></td>
<td>Tel: +44 (0) 208 846 1234</td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:c.gupte00@imperial.ac.uk">c.gupte00@imperial.ac.uk</a></td>
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<thead>
<tr>
<th>Module Lead</th>
<th>Bariatrics</th>
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<tbody>
<tr>
<td>Mr Ahmed Ahmed</td>
<td>Clinical Senior Lecturer in Bariatric Surgery</td>
</tr>
<tr>
<td></td>
<td>Department of Surgery and Cancer</td>
</tr>
<tr>
<td></td>
<td>Imperial College London</td>
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<td>Contact information:</td>
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<tr>
<td></td>
<td>Charing Cross Hospital, Charing Cross Campus</td>
</tr>
<tr>
<td></td>
<td>Tel: +44 (0) 208 846 1081</td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:a.ahmed07@imperial.ac.uk">a.ahmed07@imperial.ac.uk</a></td>
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<table>
<thead>
<tr>
<th>Module Lead</th>
<th>Vascular</th>
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</thead>
<tbody>
<tr>
<td>Mr Colin Bicknell</td>
<td>Clinical Senior Lecturer and Hon Consultant Vascular Surgeon</td>
</tr>
<tr>
<td></td>
<td>Department of Surgery and Cancer</td>
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<tr>
<td></td>
<td>Imperial College London</td>
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<tr>
<td></td>
<td>Contact information:</td>
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<tr>
<td></td>
<td>10th Floor QEQM Building</td>
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<tr>
<td></td>
<td>St Marys Hospital</td>
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<td></td>
<td>South Wharf Road, London, W2 1BL</td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:colin.bicknell@imperial.ac.uk">colin.bicknell@imperial.ac.uk</a></td>
</tr>
</tbody>
</table>
You will meet many other academics and clinicians during the programme. They have been asked to make sure they introduce themselves and let you know how you can contact them in case of need.

### Other Useful Contacts and Information

<table>
<thead>
<tr>
<th>Contact</th>
<th>Email/Website</th>
<th>Tel/Email</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>St Mary’s Campus Library</strong></td>
<td><a href="mailto:library@imperial.ac.uk">library@imperial.ac.uk</a></td>
<td>020 7594 3692</td>
</tr>
<tr>
<td></td>
<td>Post-graduate Information literacy support is also available through your liaison librarian: Jackie Cousins, <a href="mailto:j.cousins@imperial.ac.uk">j.cousins@imperial.ac.uk</a></td>
<td></td>
</tr>
<tr>
<td><strong>Central Library South Kensington</strong></td>
<td><a href="http://www.imperial.ac.uk/library">www.imperial.ac.uk/library</a></td>
<td>020 7594 8820</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:library@imperial.ac.uk">library@imperial.ac.uk</a></td>
<td></td>
</tr>
<tr>
<td><strong>Registry</strong></td>
<td>Registry administers a range of services, including registration, fees, records, quality assurance, course and assessment regulations, and admissions. For full details, please go to their website.</td>
<td><a href="http://www.imperial.ac.uk/registry/">http://www.imperial.ac.uk/registry/</a></td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:registry.support@imperial.ac.uk">registry.support@imperial.ac.uk</a></td>
<td></td>
</tr>
<tr>
<td><strong>Registry: Higher Degrees</strong></td>
<td><a href="mailto:higher.degrees@imperial.ac.uk">higher.degrees@imperial.ac.uk</a></td>
<td>020 7594 8014</td>
</tr>
<tr>
<td><strong>Graduate School</strong></td>
<td>You are a member of the Graduate School. The Graduate School has overall quality assurance responsibility for this degree. The Graduate School also provides transferable skills training to help you develop skills to support your academic studies and progress in your career. Master’s students are encouraged to develop professional skills as part of their postgraduate education at Imperial. For further information visit:</td>
<td><a href="http://www.imperial.ac.uk/study/pg/graduate-school/professional-skills/">http://www.imperial.ac.uk/study/pg/graduate-school/professional-skills/</a></td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:graduate.schools@imperial.ac.uk">graduate.schools@imperial.ac.uk</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td><a href="http://www.imperial.ac.uk/study/pg/graduate-school/">http://www.imperial.ac.uk/study/pg/graduate-school/</a></td>
<td></td>
</tr>
<tr>
<td><strong>Divisional Director of Post Graduate Studies</strong></td>
<td>Professor Phillip Bennett</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Faculty of Medicine, Department of Surgery and Cancer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Please contact through: Susan Farrell, <a href="mailto:susan.farrell@imperial.ac.uk">susan.farrell@imperial.ac.uk</a></td>
<td></td>
</tr>
<tr>
<td><strong>Postgraduate Education Manager, Surgery and Cancer</strong></td>
<td>Susan (Suze) Farrell is the Postgraduate Education Manager for the Division of Surgery. For matters that cannot be resolved at programme level, you should contact Suze:</td>
<td>020 7594 0894</td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:susan.farrell@imperial.ac.uk">susan.farrell@imperial.ac.uk</a>@imperial.ac.uk</td>
<td></td>
</tr>
<tr>
<td><strong>Student Counsellors</strong></td>
<td>Trained counsellors offer a confidential service on a range of matters. Mr David Allman, Senior Student Counsellor</td>
<td>020 7594 9637</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.imperial.ac.uk/counselling">www.imperial.ac.uk/counselling</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:counselling@imperial.ac.uk">counselling@imperial.ac.uk</a></td>
<td></td>
</tr>
<tr>
<td><strong>Disability Advisory Service</strong></td>
<td>Offers advice to staff and students about reasonable adjustments that should be made and help that is available to cope with a range of disabilities, including dyslexia.</td>
<td><a href="http://www3.imperial.ac.uk/disabilityadvisoryservice">http://www3.imperial.ac.uk/disabilityadvisoryservice</a></td>
</tr>
<tr>
<td></td>
<td>College Disabilities Officer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ms Mary Bown</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tel: 020 7594 2168</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:disabilities@imperial.ac.uk">disabilities@imperial.ac.uk</a></td>
<td></td>
</tr>
</tbody>
</table>
| Other Learning Support | [http://www.imperial.ac.uk/students/success-guide/](http://www.imperial.ac.uk/students/success-guide/)  
| | [http://www.imperial.ac.uk/students/student-hub/](http://www.imperial.ac.uk/students/student-hub/)  
| **College Tutors** | The tutors can help with a range of matters. They are usually consulted after other routes have been tried. They act confidentially and can become involved in academic or pastoral matters, including when a student may be reluctant to discuss a matter with programme or departmental personnel. [www3.imperial.ac.uk/students/collegetutors](http://www3.imperial.ac.uk/students/collegetutors)  
| **Student Welfare and Advice and Student Health Services** | [http://www.imperial.ac.uk/student-space/](http://www.imperial.ac.uk/student-space/)  
| | [http://www.imperialcollegehealthcentre.co.uk](http://www.imperialcollegehealthcentre.co.uk)  
| | Student Health Services  
| | Email: healthcentre@imperial.ac.uk  
| | Tel: 020 7584 6301  
| **Health & Safety** | [http://www3.imperial.ac.uk/safety](http://www3.imperial.ac.uk/safety)  
| **The Graduate School** | Information about the Graduate School [http://www.imperial.ac.uk/study/pg/graduate-school/](http://www.imperial.ac.uk/study/pg/graduate-school/)  
| | Professional Skills Development: [http://www.imperial.ac.uk/study/pg/graduateschool/professional-skills/](http://www.imperial.ac.uk/study/pg/graduateschool/professional-skills/)  
| **The Postgraduate Prospectus** | [http://www.imperial.ac.uk/study/pg](http://www.imperial.ac.uk/study/pg)  
| | Information about courses, faculties, financial issues and overall postgraduate life at the College  
| | (includes a link to programme specification)  
| **Graduation and College Closure information** | [http://www.imperial.ac.uk/graduation/](http://www.imperial.ac.uk/graduation/)  
| | [http://www.imperial.ac.uk/admin-services/secretariat/information-for-staff/college-year-card/](http://www.imperial.ac.uk/admin-services/secretariat/information-for-staff/college-year-card/)  

The MSc, PG Dip and PG Cert in Surgical Innovation:

(a) Background, Purposes and Outcomes

The Imperial College MSc, PG Dip and PG Cert in Surgical Innovation is the first programme of its kind in the UK. Building on the clinical and research excellence of the Division of Surgery, it seeks to attract students of the highest calibre by providing them with first class research-led education. Within the unique environment of the Division, students will be exposed to a combination of practical and theoretical teaching, spanning a range of surgical subspecialties. They will be offered a multidisciplinary programme with first-hand experience of applying new technologies to the surgical management of patients, clinical risk management, educational research, research methods and patient safety. The programme will use a blended approach combining online distance learning / e-learning with face-to-face teaching that will include interactive lectures, seminars, tutorials, case based discussions, panels, expert debates and practical sessions.

The aim of the programme is to provide a solid academic foundation on both clinical and non-clinical topics relevant to modern surgical trainees, as well as other members of the Multi-disciplinary Team and those interested in surgery as a field of study, with especial emphasis on how surgery has radically changed and will continue to advance in the 21st century. The modular nature of the programme allows it to be tailored to the unique needs of individual students, with the possibility to gain a PG Certificate in Surgical Innovation, a PG Diploma (Clinical option) or an MSc in Surgical Innovation (Clinical option). The clinical specialty streams are in line with the current trend in surgical subspecialisation. The core modules will equip the surgeon with much needed skills in education, leadership and safety, quality and technological innovation in the current NHS environment. The MSc option will provide a good research experience that, together with the chosen taught modules, will serve as a solid foundation for further academic progression.

The programme seeks to promote world class scholarship, education and research in the field of Surgery and allied health professions, fostering interdisciplinary working. The modular structure of the programme aligns well with the Intercollegiate Surgical Curriculum (ICS), offering trainees the opportunity to gain specific qualifications in topics relevant to their special interest, as well as exposing them to key non-clinical skills, concepts and techniques in surgical research.

The specific objectives of the programme include:

- Enhance knowledge of the scientific basis of surgery
- Acquire a critical understanding of the issues involved in the application of technology to surgery
- Enhance the understanding of new challenges faced by the surgeon with a view to developing practical problem-solving skills
- Provide multidisciplinary training and encourage collaborative work with other clinical and non-clinical disciplines
- Provide experience in the methodology and principles of conducting research with application to clinical medicine and surgery
- Help acquire analytical and assessment skills to apply quality assurance standards to clinical surgery
- Provide the academic basis for specialized surgical practice in different disciplines
- Produce graduates equipped to further their careers in surgery
- Provide a solid foundation and training in research skills for those who intend to go on to study for an MD(Res) or PhD
- Attract highly motivated students, both from within and outside the UK
- Provide a supportive learning environment
(b) Programme Structure

The Postgraduate Certificate (PG Cert) comprises four taught (Core) modules over 8 months, each with one week of intensive contact teaching (approx 35 hours) and further private study required to complete coursework and summative assessment. The core modules provide the foundation upon which more specialised knowledge is built, however, students may wish to exit the programme here taking the knowledge and experience gained back into the clinical setting with a PG Certificate in Surgical Innovation.

The Postgraduate Diploma (PG Dip) comprises six taught modules (four Core and two chosen speciality stream) and a Library dissertation over 16 months.

The MSc programme comprises seven taught modules (four Core, two chosen speciality stream and Research Methods), a library dissertation and a research project over 24 months.

Table 1 – Summary of Programme Structure and ECTS Credits

<table>
<thead>
<tr>
<th>MODULE</th>
<th>ECTS Credits</th>
<th>TYPE</th>
<th>TERM/YEAR</th>
<th>Assessment</th>
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</thead>
<tbody>
<tr>
<td>Module 1: Principles of Surgery</td>
<td>7.5</td>
<td>Core Module</td>
<td>Autumn Term / Year 1</td>
<td>Coursework (1): student presentations (10%) Coursework (2): evidence-based mini-project on the development of innovative clinical and research ideas (70%) 1.5 hours Exam: MCQ and analysis of clinical scenarios (20%)</td>
</tr>
<tr>
<td>Module 2: Surgical Education</td>
<td>7.5</td>
<td>Core Module</td>
<td>Spring Term / Year 1</td>
<td>Coursework (1): Pre-module Assignment – pre-reading, preparation of teaching video, online evaluation of teaching (self, peers &amp; tutor) (10%) Coursework (2): In module coursework (small group activity with assessed presentation) (20%) Coursework (3): Critical reflection on educational practice (teaching or curriculum design) (70%)</td>
</tr>
<tr>
<td>Module 3: Improving Safety, Implementing Change</td>
<td>7.5</td>
<td>Core Module</td>
<td>Spring Term / Year 1</td>
<td>Coursework (1): Structured debate (30%) Coursework (2): An individually produced and assessed essay-style assignment focussed on applying the basic principles of fully designing, implementing and evaluating a patient safety or quality improvement intervention (70%)</td>
</tr>
<tr>
<td>Module 4: Interventional Technology and Imaging</td>
<td>7.5</td>
<td>Core Module</td>
<td>Autumn Term / Year 1</td>
<td>Coursework (1): Critical reflection on the use and challenges of ITI in a chosen surgical speciality (70%) 1.5 hour Exam (1): e-learning MCQs/EMQs at the end of each e-learning component (10%) 1.5 hour Exam (2): written exam (20%)</td>
</tr>
<tr>
<td>TOTAL CORE MODULES</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Module</td>
<td>ECTS Credits</td>
<td>TYPE</td>
<td>TERM/YEAR</td>
<td>Assessment</td>
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<tr>
<td><strong>PG Dip</strong></td>
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<tr>
<td>Bariatrics 1</td>
<td>7.5</td>
<td>Speciality Module</td>
<td>Summer Term / Year 1</td>
<td>Coursework (1): student presentations (e.g. Pharmacotherapy, Supplements or Nutraceuticals) (10%)</td>
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<tr>
<td>Obesity Medicine</td>
<td></td>
<td></td>
<td></td>
<td>Coursework (2): Review Assignment (e.g. What's new in obesity management) (70%)</td>
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<td></td>
<td>1.5 hours Exam: Practical Exam (e.g. assessing the obese patient (20%))</td>
</tr>
<tr>
<td>Bariatrics 2</td>
<td>7.5</td>
<td>Speciality Module</td>
<td>Summer Term / Year 1</td>
<td>Coursework (1): Student presentations (e.g. What's new in bariatric intervention) (10%)</td>
</tr>
<tr>
<td>Bariatric Surgery</td>
<td></td>
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<td></td>
<td>Coursework (2): Oral assessment (e.g. Bariatric complications) (20%)</td>
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<td>Coursework (3): Review assignment (e.g. Mechanisms of action of bariatric surgery) (70%)</td>
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<tr>
<td><strong>SUBTOTAL SPECIALITY STREAM</strong></td>
<td>15</td>
<td></td>
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<tr>
<td>Colorectal 1</td>
<td>7.5</td>
<td>Speciality Module</td>
<td>Summer Term / Year 1</td>
<td>Coursework (1): Structured debates on controversial topics (10%)</td>
</tr>
<tr>
<td>Emergency Surgery and Colorectal Cancer</td>
<td></td>
<td></td>
<td></td>
<td>Coursework (2): End of module essay assignment (70%) 30 minute exam: Oral assessment (20%)</td>
</tr>
<tr>
<td>Colorectal 2</td>
<td>7.5</td>
<td>Speciality Module</td>
<td>Summer / Year 1</td>
<td>Coursework (1): Structured debates on controversial topics (10%)</td>
</tr>
<tr>
<td>Inflammatory Bowel Disease, Perianal Disease and Functional Bowel Disorders</td>
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<td></td>
<td></td>
<td>Coursework (2): End of module essay assignment (70%) 30 minute exam: Oral assessment (20%)</td>
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<tr>
<td><strong>SUBTOTAL SPECIALITY STREAM</strong></td>
<td>15</td>
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<tr>
<td>Orthopaed 1</td>
<td>7.5</td>
<td>Speciality Module</td>
<td>Summer Term / Year 1</td>
<td>Coursework (1): Review assignment (70%) 30 min Exam: Oral Assessment (30%)</td>
</tr>
<tr>
<td>Orthopaedics Elective Practice</td>
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<tr>
<td>Orthopaed 2</td>
<td>7.5</td>
<td>Speciality Module</td>
<td>Summer / Year 1</td>
<td>Coursework (1): E-teaching case report documenting a topical clinical case (70%) 1.5 min Exam: Simulation-based practical exam (30%)</td>
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<tr>
<td>Trauma and Fracture Care</td>
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<tr>
<td><strong>SUBTOTAL SPECIALITY STREAM</strong></td>
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<tr>
<td>PG Dip</td>
<td>Module</td>
<td>ECTS Credits</td>
<td>TYPE</td>
<td>TERM/ YEAR</td>
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</tbody>
</table>
|        | **Oesophago 1**                                                        | 7.5          | Speciality Module | Summer Term / Year 1 | Coursework (1): Structured debates on controversial topics (30%)  
Coursework (2): End of module essay-style assignment (70%)                                                                                       |
|        | **Oesophago- Gastric Cancer**                                          |              |             |                       |                                                                                                                                                                                                           |
|        | **Oesophago 2**                                                        | 7.5          | Speciality Module | Summer / Year 1      | Coursework (1): Structured debates on controversial topics (10%)  
Coursework (2): Student Presentations (20%)  
Coursework (3): End of module essay-style assignment (70%)                                                                                   |
|        | **Benign Conditions of the Oesophagus and Stomach and OG Emergencies** |              |             |                       |                                                                                                                                                                                                           |
|        | **SUBTOTAL SPECIALITY STREAM**                                         | 15           |             |                       |                                                                                                                                                                                                           |
|        | **Vascular 1**                                                         | 7.5          | Speciality Module | Summer Term / Year 1 | Coursework (1): Structured debates on controversial topics (10%)  
Coursework (2): End of module review assignment (70%)  
30 min Exam: Oral assessment (20%)                                                                                                          |
|        | **General and Aortic Surgery**                                         |              |             |                       |                                                                                                                                                                                                           |
|        | **Vascular 2**                                                         | 7.5          | Speciality Module | Summer / Year 1      | Coursework (1): Structured debates on controversial topics (10%)  
Coursework (2): End of module review assignment (70%)  
30 min Exam: Oral Assessment (20%)                                                                                                          |
<p>|        | <strong>Peripheral and Venous Surgery</strong>                                      |              |             |                       |                                                                                                                                                                                                           |
|        | <strong>SUBTOTAL SPECIALITY STREAM</strong>                                         | 15           |             |                       |                                                                                                                                                                                                           |
|        | <strong>Library dissertation</strong>                                               | 15           | Dissertation | Summer / Year 1; Autumn / Year 2 | 7500 – 10,000 dissertation normally based on the specialist stream the student has chosen, but can be based on one of the cross-cutting themes such as education, quality improvement or imaging |
|        | <strong>TOTAL SPECIALITY STREAM AND LIBRARY DISS.</strong>                          | 30           |             |                       |                                                                                                                                                                                                           |</p>
<table>
<thead>
<tr>
<th>MSc</th>
<th>Module</th>
<th>ECTS Credits</th>
<th>TYPE</th>
<th>TERM/YEAR</th>
<th>Assessment</th>
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<tbody>
<tr>
<td></td>
<td>Research methods module</td>
<td>7.5</td>
<td>Research</td>
<td>Autumn Term / Year 2; Spring Term / Year 2</td>
<td>Coursework (1): Presentation of research proposal Coursework (2): Research Proposal and Plan</td>
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<td></td>
<td>Research Project</td>
<td>22.5</td>
<td>Research</td>
<td>Spring Term / Year 2; Summer / Year 2; Summer / Year 2</td>
<td>Coursework (1): Research Plan Assessment – formative feedback Coursework (2): Early Stage Review – formative feedback Coursework (3): Late Stage Review – formative feedback Coursework (4): 10,000-15,000 dissertation (100%)</td>
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<tr>
<td></td>
<td><strong>TOTAL RESEARCH METHODS AND RESEARCH PROJECT</strong></td>
<td><strong>30</strong></td>
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</table>
(c) Requirements for Programme Completion

This section summarises the requirements for programme completion. More detailed information on assessment can be found elsewhere in this document.

Credits

PG Cert: Thirty credits (ECTS) worth of study and assessment must be successfully attained. These comprise four core modules and accompanying module activities / assessments.

PG Dip: A total of sixty credits (ECTS) worth of study and assessment must be successfully attained. These comprise four core modules, two speciality stream modules, all accompanying module activities / assessments, as well as a library dissertation.

MSc: A total of ninety credits (ECTS) worth of study and assessment must be successfully attained. These comprise four core modules, two speciality stream modules, all accompanying module activities / assessments, a library dissertation, as well as a research project.

Duration of Study

PG Cert: The expected duration of the PG Cert is 8 months starting in October and finishing by May of the same academic year (Year 1).

PG Dip: The expected duration of the PG Cert is 16 months starting in October and finishing by Jan of the following academic year (Year 2).

MSc: The expected duration of the PG Cert is 24 months starting in October and finishing by September of the following academic year (Year 2).

Completion within these time period is the expectation; any extension is discretionary, not guaranteed and may incur extra financial outlay. In exceptional circumstances, permission to interrupt studies can be discussed with the programme directors and applied for to Registry. On resumption of studies, the normal period for completion can be extended. Interruptions of study, and other arrangements outside the normal period of study and examination, are detailed in Part 3 on Imperial College Regulations. Changes to registration status may incur additional fees.

Attendance

Full attendance at taught sessions and booked meetings with tutors is the expectation. If this cannot happen for any good reason, including sickness, attendance at 70% of taught sessions for each module is normally the minimum requirement. Attendance will be recorded by means of a sign-in sheet at teaching sessions and occasional monitoring by tutors. Any anticipated absence of any length should be discussed with the programme administrator, Susan Clark, the module coordinator and the programme director(s). Any unanticipated absence (such as sickness) should be notified to the programme administrator immediately.

Because some coursework will be undertaken and completed during the week-long periods of attendance, you will need to be especially careful to check the assessment requirements for each module. Discuss the implications of any planned or unplanned absence with the module coordinator and/or programme organisers. If, for whatever reason, you have been unable to meet the attendance minimum requirements, it is imperative to discuss this immediately with the programme director(s). If a whole or significant part of a module is missed due to extenuating circumstances, the student may be able to take it again in the following year. If there are insufficient grounds for not having met this minimum attendance, you may be regarded as a first attempt fail for the module. In addition, a poor attendance record is a factor that is taken into account in the event of any borderline assessment decisions.

Please note that the College and its Faculties are required by the UK Border Agency to ensure that all registered students are in attendance. The PG Cert, PG Dip and MSc in Surgical Innovation is expected to comply with Departmental policies around attendance requirements, which will be discussed during Module 1.

Completion of Assessments

All assessments MUST meet the specified deadlines. According to current College policy, late submissions will be considered a first-attempt fail, unless acceptable mitigating circumstances are demonstrated. Assessment criteria, requirements and deadlines, as well as penalties for not meeting requirements, are set out fully in other sections of this document and in the individual module outlines. Vivas may be used at the discretion of the examiners.
Core Modules Teaching Dates and Deadlines (2016-17 Cohort)

### Year 1

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>1</td>
<td>15 Sep 2016</td>
<td><strong>Introduction Day</strong></td>
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<tr>
<td>2</td>
<td>19 Sep 2016</td>
<td><strong>Principles of Surgery Teaching Week</strong></td>
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<td></td>
<td><em>Principles of Surgery student presentations DUE</em></td>
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<td><em>Principles of Surgery MCQ and clinical scenario exam DUE</em></td>
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<tr>
<td>9</td>
<td>07 Nov 2016</td>
<td><strong>Interventional Technology and Imaging Teaching Week</strong></td>
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<td></td>
<td><em>Interventional Technology and Imaging MCQ/EMQs DUE</em></td>
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<tr>
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<td></td>
<td><em>Interventional Technology and Imaging module exam DUE</em></td>
</tr>
<tr>
<td>11</td>
<td>21 Nov 2016</td>
<td><strong>Principles of Surgery written assessment DUE</strong></td>
</tr>
<tr>
<td>18</td>
<td>9 Jan 2017</td>
<td><strong>Improving Safety, Implementing Change Teaching Week</strong></td>
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<tr>
<td></td>
<td></td>
<td><em>Improving Safety, Implementing Change structured debate DUE</em></td>
</tr>
<tr>
<td>19</td>
<td>16 Jan 2017</td>
<td><strong>Interventional Technology and Imaging written assessment DUE</strong></td>
</tr>
<tr>
<td>21</td>
<td>30 Jan 2017</td>
<td><strong>Surgical Education Teaching Week</strong></td>
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<td><em>Surgical Education pre-module assignment DUE</em></td>
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<td><em>Surgical Education group presentation DUE</em></td>
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<tr>
<td>28</td>
<td>20 Mar 2017</td>
<td><strong>Improving Safety, Implementing Change written assessment DUE</strong></td>
</tr>
<tr>
<td>31</td>
<td>10 Apr 2017</td>
<td><strong>Surgical Education written assessment DUE</strong></td>
</tr>
</tbody>
</table>
Ensuring your programme is a success – who does what?

This section indicates the roles and responsibilities that students can expect from the programme personnel and what the programme team expect from students.

PROGRAMME DIRECTORS

- Have oversight of the quality and arrangements for the whole programme
- Write an annual Student Handbook
- Deal in a fair and timely manner with student queries, concerns, difficulties and complaints
- Take into account student views about how the programme might be enhanced
- Liaise with the external examiner as needed
- Liaise with Registry and the Graduate School as needed
- Act as the admissions tutors for the programme
- Keep in touch with the programme team, and attend Staff Student Liaison Committee meetings and the Programme Management Board
- Ensure the programme is evaluated
- Produce programme reports
- Take a lead in programme development

MODULE COORDINATORS

- Have oversight of the quality and arrangements for each module and arrange its teaching and assessment
- Produce an outline of the module for which they are responsible, to include learning outcomes for the module, indication of the assessment requirements, a module timetable, and a short reading list that covers some key topics
- Ensure their module is taught according to stated purposes and the outline
- Set the module assessment and ensure arrangements for this are satisfactory
- Act in a timely manner as markers for assessment associated with the module
- Ensure the module content and outcomes articulate well with programme goals
- Ensure the module is evaluated by means of a standard questionnaire that may be supplemented to cover topics relevant to the module
- Take into account student views about how the module might be enhanced
- Endeavour to attend any programme team meetings and the Staff Student Liaison Committee and the Programme Management Board
- Take a lead in module development as appropriate
- Contribute to programme development

DEPARTMENTAL POSTGRADUATE TAUGHT COURSE ADMINISTRATOR

- Provides high level admin input to the programme
- Contributes to developing the organisational and administrative structure of the programme
- Deputises for the programme organisers when necessary
- Is the first point of contact for student queries and difficulties, responding in a timely manner, and referring these elsewhere when necessary
- Is the main message conduit between tutors and the students on the programme
- Makes appointments for students with their personal tutor or the programme organisers
- Contributes to producing, collating and distributing programme information, including the student handbook, module information and resources for teaching sessions, including photocopying and/or uploading it to Blackboard
- Liaises with tutors to assist with the smooth running of sessions
- Issues receipts when summative work is received
- Keeps accurate records, including of attendance, assessment and evaluation.
- Produces agendas, papers and minutes for programme meetings
SESSION LEADS / PRESENTERS (TUTORS), i.e. those teaching sessions
- Provide a PowerPoint and / or lecture notes for each session in advance to be uploaded into Blackboard. These should include Learning Outcomes, further reading and notes on the topic
- Introduce themselves to students and provide contact information
- Arrive for teaching well prepared and in a timely manner
- Adequately structure each session(s) making use of a suitable range of teaching modalities and resources
- Respond to session specific student queries and questions
- Take into account student views about how the session might be enhanced
- Participate in assessment as necessary
- Propose possible library dissertation topics and/or MSc projects
- Contribute to module/programme development

PERSONAL (PASTORAL) TUTOR
- Be available during module blocks for short, booked appointments
- Respond as quickly as possible if contacted outside module periods
- Act in the best interest of students
- Maintain confidentiality unless a student gives permission to the contrary
- Contribute to the programme team as needed and the Staff Student Liaison Committee and Programme Management Board

SUPERVISORS
- Discuss and advise about suitability, scope, research questions, literature searches, methods, analysis and writing up for the research project
- Review and advise on applications for ethical approval of research project
- Read and comment on a draft of the dissertation, if submitted in a timely manner (as arranged)
- Provide timely responses and feedback to students on queries and drafts
- Meet with students supervised at least three times, including one near the start of the project and one near the end
- Mark dissertations in a timely fashion using the specified marking criteria

STUDENTS
- Take responsibility for own study and success, including deciding whether or not to print out notes from Blackboard, choice of options module and dissertation project etc.
- Make arrangements and sacrifices/find the time to put the necessary effort into their studies
- Attend and contribute to the taught sessions
- Undertake private study
- Complete assessment requirements
- Conduct a research project
- Keep to deadlines for assessment and other matters
- Realise they play a part in the experience of everyone involved with the programme. Students have responsibility towards the learning of other students and are expected to participate fully in class and group activity, or in study groups.
- Are responsible for conducting research and other MEd work ethically. They are to seek ethical approval for their research proposal with oversight from their supervisor
- Act and apply criteria impartially if called upon to peer assess their colleagues
- Ensure they have ready access from home base, i.e. off campus, to an internet capable computer. This will be needed for word processing assessments and Blackboard access.
- Notify promptly any absences, other disruptions to study or any relevant change in circumstances, and ensure they appreciate these may have implications for assessment and completion
- Keep to deadlines and submit information (including any changes in contact details) in a timely manner
- Participate in formal module and programme evaluation and contribute to discussion about module and programme development
- Consider taking on the role of student representative
- Are responsible for ensuring their fees are paid and that they are registered on the programme
Part 2 – The Modules

Core Modules 1-4

Module 1 Principles of Surgery

The advancements in all fields of Surgery over the last three decades have been truly astonishing. In depth understanding of the mechanisms of response to stress, shock and the process of healing; minimally invasive approaches even for complex operations; relentless development and adoption of new technologies; advancements in peri-operative management, critical care and trauma surgery, and our ability to operate successfully on patients with much more complex problems are just some characteristic examples.

In addition, modern surgical practice has been challenged by major issues related to overall clinical governance, training and professional development, as well as medico-legal and ethical issues. This module addresses the principles of modern surgical practice, which are common to all surgical specialties. Knowledge and understanding of such principles is both fundamental and a fascinating prospect for the aspiring surgeon.

The aim of this module is to provide students with sound and in depth knowledge of the principles of surgery, so that they be able to link with other surgical and non-surgical specialties, analyse and learn from clinical cases, and generate their own ideas for the future of Surgery.

Module 2 Surgical Education

There is increasing emphasis across all specialities on sound education, assessment and appraisal, and a growing recognition that education is a key to safe clinical practice and effective professional development. As surgical training shifts from its traditional apprenticeship model to more competency-based and technology-supported approaches, there is a need to adequately understand the theoretical foundations and judgments that underpin educational development and innovation.

The aim of this module is to introduce students to the field of education and to key theories and practices common to the current education of surgeons. Students will be familiarised with the policy and context of surgical education, including an overview of current simulation and educational technologies, a number of which have been developed by research teams in the Division of Surgery. Students will develop their teaching skills and understanding of theory through practical applications before, during and after the module.

Module 3 - Improving safety implementing change

The aim of this module is to introduce students to the science and practice of quality and outcomes improvement – including the range of tools and methods that have been applied within surgery in the past decade. The module will equip students with the skills needed to design, implement and evaluate such interventions within the clinical workplace.

The module has a practical focus and offers examples of a range of safety and quality interventions introduced into surgery – including care bundles, checklists, training packages, integrated care pathways and others. Importantly, the module will expose students to similar approaches used across other specialties and clinical areas to provide a consolidated vision of how to improve quality holistically within a healthcare organisation.

Students will learn about the underlying rationale for safety and quality improvement, barriers to the implementation of interventions and how to evaluate if an intervention is working and achieving its aims. The module will elaborate principles of the newly forming quality and implementation sciences and will introduce relevant toolkits for application to surgery – including Plan-Do-Study-Act cycles, the Behaviour Change Wheel and others.
Module 4 Theory and practice of technology & simulation in surgery & education

Advances in interventional technology and imaging (ITI) are going to radically change surgery in the 21st century, with boundaries between surgery, endoscopy and radiology disappearing.

During this module the student will be introduced to technological developments and innovation that have provided major turning points in surgery in the past. S/he will then learn about state of the art interventional technologies and imaging.

The aim of this module is to provide students with a solid understanding and appreciation of the technology currently in use. It will hopefully also stimulate some participants to consider how they may work together with engineering, computing and other disciplines to bring about advances in the way they work.

Extensive use will be made of e-learning resources to cover the fundamental / basic concepts and techniques of ITI, whilst F2F sessions will focus on state of the art.
Specialty Stream Modules

**Bariatrics**

The aim of the Bariatrics Stream is to provide practitioners with an understanding of obesity.

**Bariatrics 1 Obesity Medicine**

The goal of the Obesity Medicine module is to provide students with the knowledge and skills to assess and manage people who are overweight and obese, including the increasing numbers who have surgical intervention. Students will gain an insight into the broad range and role of medical interventions for obesity.

**Bariatrics 2 Bariatric Surgery**

The goal of the Bariatric Surgery module is for students to gain an understanding of the surgical treatment of morbid obesity, including early and late complications.

**Oesophago-gastric Surgery**

**Oesophago 1 Oesophago-gastric Cancer**

This module considers all aspects of oesophago-gastric cancer, including epidemiology, pathology, clinical aspects, staging and all features of managing patients with OG cancer. There is an increasing incidence of cancer of the lower oesophagus and gastro-oesophageal junction. The pathological basis for this, including the link between gastro-oesophageal reflux disease, Barrett's oesophagus and cancer, is also studied, together with some recent advances in the diagnosis of dysplasia in Barrett's oesophagus and in the treatment of dysplasia and early cancer. The module includes visits to the endoscopy suite for observing therapeutic endoscopy, and to the operating theatre for observing cancer resections.

**Oesophago 2 Benign conditions of the oesophagus and stomach and OG emergencies**

This module considers the main benign conditions of the stomach and oesophagus. It covers all aspects of gastro-oesophageal reflux (GORD) and oesophageal motility disorders, including pathology, investigations, non-surgical treatments and surgery. All the controversies in the management of GORD and Achalasia are also studied and discussed. The module includes visits to the GI physiology laboratory to enable students to clearly understand OG physiology testing, as well as further visits to the endoscopy suite and live operating of some of the conditions covered in the module.

**Orthopaedic Surgery**

**Orthopaedics 1 Elective Practice**

Musculoskeletal disorders represent a significant burden on health services internationally, with an ageing population that continues to grow. The module aims to inform students about the different types of pathology seen in orthopaedic elective practice, with an emphasis known complex aetiological factors. Contemporary and newer biological and robotic techniques are discussed to give the student an overview of current practice, as well as the possibilities for future innovation.

**Orthopaedics 2 Trauma and Fracture Care**

Traumatic injuries and fracture care continue to evolve. There is a risk of significant long-term morbidity if neglected. This module gives students an understanding of the major musculoskeletal
injury patterns and the treatment available for them. Simulator sessions will be available to assess and encourage improvements in students surgical technique with common orthopaedic fracture fixation techniques. Students will be required to document a clinical case with the use of multimedia recording techniques and present this as a case report.

**Colorectal Surgery**

Colorectal surgery encompasses a broad spectrum of benign and malignant conditions, both in the elective and acute surgical setting.

*Colorectal 1 Emergency Surgery and Colorectal Cancer*

This module is designed to give a complete overview focusing on controversies in management of different disorders and recent advances in coloproctology. Predominantly a distance e-learning programme, face to face teaching will use a combination of state of the art lectures, tutorials, case-based discussions with expert panels, and journal clubs. The module will cover new technologies in coloproctology, emergency colorectal surgery, and management of colorectal and anal malignancies.

*Colorectal 2 Inflammatory Bowel Disease, Perianal Disease and Functional Bowel Disorders*

The module will cover medical and surgical management of IBD, other benign conditions including diverticular disease, anorectal conditions and functional bowel disorders. Predominantly a distance e-learning programme, face to face teaching will use a combination of state of the art lectures, tutorials, case-based discussions with expert panels, and journal clubs. The module will cover new technologies in coloproctology, emergency colorectal surgery, and management of colorectal and anal malignancies.

**Vascular Surgery**

*Vascular 1 General and Aortic Surgery*

Vascular surgery is a rapidly evolving specialty led by advances in technology. With this unrelenting evolution of new techniques, it is important to stay up to date and this can only be achieved by discussion with experts.

This course is designed to give students the opportunity to study in-depth the latest developments related to vascular and endovascular surgery in an interactive format. The module will focus on vascular disease in general, as well as aortic pathology and treatments. New technologies in this area will be a focus of discussion.

*Vascular 2 Peripheral and Venous Surgery*

This course is designed to give students the opportunity to study in-depth the latest developments related to vascular and endovascular surgery in an interactive format. The module will focus on carotid disease, peripheral arterial and visceral artery treatments, and discuss venous disease in depth. New technologies in this area will be a focus of discussion.
Part 3 - What you can expect

What you can expect: (a) Teaching and Supervision

TEACHING
Teaching typically starts at 9am during the week, finishing by 5:30pm. On normal module days, teaching may occur for all or part of an approximately eight hour day, normally with an hour break for lunch around 12.30 and short mid-morning and afternoon breaks. In most modules there will be some ‘gaps’ in teaching to enable you to carry out private study, visit the Library, or book in appointments with programme personnel. The lengths of periods of teaching dedicated to one topic may vary from 1-4 hours. Each module will be taught by a variety of tutors. Teaching will take place at St Mary’s, Charing Cross and Chelsea & Westminster campuses. You will receive a detailed timetable for each module that will indicate exact timings, venue, topic and tutor.

It is especially important that sessions start on time. We therefore urge you to allow sufficient journey time to ensure that you arrive promptly. Late arrivals are disruptive and distracting for others.

Every tutor has his/her own style and some topics lend themselves to one approach rather than another; you should not expect uniformity in teaching. Some sessions may operate as formal lectures and others as discursive, open-ended group discussions in which your participation and involvement is not only invited but expected. The aim of the programme is that internal tutors make some form of notes/PowerPoint for each session available in advance in Blackboard so that you can decide if you want to print out a paper copy of the notes – in a few instances tutors may not want participants to have notes in advance or during a session; in these cases the tutor will make them available afterwards. Sessions may include some or all of the following: information giving and processing, consideration of ideas, carrying out of tasks and practice. Discussion, use of case studies, scenarios, and context based questions will also be used.

Attendance on many modules will include periods of time where you are carrying out or completing coursework (e.g. giving a short assessed talk), working individually or in small groups.

SUPERVISION

Library Dissertation (PG Dip and MSc)

Students can pursue a dissertation topic of their choice, refining this in discussion with an appropriate supervisor and having it considered by at least one other member of the programme team before the go-ahead is given for the Library Dissertation to proceed. The topic for the Library Dissertation will normally be based on the specialist stream the student has chosen, but can be based on one of the cross-cutting themes such as education, quality improvement or imaging.

Research Project (MSc)

Students can pursue a research project of their choice, refining this in discussion with an appropriate supervisor and having it considered by at least one other member of the programme team before the go-ahead is given for the research project to continue.

The programme directors will manage the process of research topic and supervisor selection/allocation. This process is detailed in section (c) on Research Planning.

The primary responsibility of your assigned supervisor is to guide you and provide you with feedback on all areas related to the production of the dissertation. This advice encompasses the process of refining your research topic and methods, gaining ethical approval (as well as insurance and sponsorship, where relevant), collecting and analysing your data and writing up of your dissertation. It is also worth highlighting that your supervisor will normally be expected to serve as lead or co-
investigator on your ethics approval application. As such, you must ensure that your supervisor has accepted your ethics approval application prior to its submission.

A supervisor’s style will vary as will the type of experience and expertise s/he possesses. To gain the most from working with a supervisor, you should initiate and negotiate mutually agreeable meeting times and prepare thoroughly for these meetings allowing your supervisor adequate time to review and provide feedback on your work. Though supervisory relationships are based on a partnership, the roles and responsibilities of student and supervisor are distinct. On balance, the ideas generated, judgments made, and work completed for the dissertation should emanate from you.

What you can expect and need to do: (b) Learning & Study

General Principles
Most of the work on the programme will be done in your own time. Overall, the teaching input takes less time than the time you will need to put into study. It follows that the programme responsibilities are shared between tutors and participants.

Key aims of the programme are to develop your knowledge and understanding in the field of surgery and the core cross-cutting themes in order to provide a solid academic foundation on both clinical and non-clinical topics relevant to modern surgical training; to extend your ability to evaluate and to form your own interpretations and views in a discriminating and evidenced fashion with respect to the issues involved in the application of technology to surgery and the new challenges faced by the surgeon with a view to developing practical problem-solving skills; to provide the academic basis for specialized surgical practice in different disciplines; and to acquire analytical and assessment skills to apply quality assurance standards to clinical surgery.

Throughout the programme you will be encouraged to grapple with problems, either by yourself or in groups with other students. This style of teaching puts more responsibility onto you, and it makes it more demanding, but past experience has shown that students welcome the opportunities for independent and interactive learning that much of the programme is built around.

How much work?
It is hard to give guidelines. Technically speaking a PG Cert is worth 30 ECTS units / credits; a PG Dip is worth 60 ECTS credits and a MSc degree is worth 90 ECTS credits. Each credit is nominally allocated 25 hours. This accounting approach includes: teaching weeks, coursework, pre-module reading/assignments, reading, module assignments / assessments. For the PG Dip and MSc also includes the Library Dissertation. For the MSc, carrying out and writing up your research project. Altogether, this represents 750 hours for the PG Cert, 1,500 hours for the PG Dip and 2,250 hours for the MSc over a period of 8 months, 16 months and 24 months, respectively. This is a considerable figure that should not be underestimated, but keep in mind the amount of work will depend upon your baseline starting knowledge and experience; whether you do the minimum or you wish to seize the opportunity to explore some areas in greater depth; how quick a worker you are and so on. You will all have preferences for study patterns that suit your inclinations and working lives. Some will prefer to work very long hours over a few concentrated periods, others to do an hour of work most days. During face to face teaching weeks, you can also expect to have to work a few hours each day outside of timetabled hours. All students should think carefully about assuming additional, large-scale, commitments on top of the programme’s work.

Organising and Planning your study
The key is not to let work build up and to be sure of meeting the deadlines specified in Part 1. Set yourself intermediate deadlines and try to keep reading going on a regular basis. Use the deadlines to pace your work. It is especially important to submit module assignments on time, as you will incur penalties for late submission (provided there are no mitigating circumstances) and will create a backlog of work for yourself and others who need to mark and/or provide you feedback.
If you are doing the PG Dip or MSc, when you get to the stage of planning your Library Dissertation and research project, please also take into consideration that the ethics approval processes require that you submit and keep track of numerous documents that have to be considered by various individuals. They will not work to your timetable. You need to work to theirs.

Taking responsibility and seizing the initiative
We use a variety of teaching methods. These are intended to stimulate your interest in the topics and your motivation towards your learning. It is your learning, your ideas, your perspectives and your particular combination of reflection, knowledge and action that are important. This programme is your programme. Make it your programme. See us as resources to help you with your interests, concerns and problems.

We look to you to become active in your own learning. You will achieve this in a variety of ways, e.g.:

- Devising a timetable of work for yourself to include target dates for different assignments and elements of your programme;
- Choosing carefully an speciality stream that meets your needs and fits your schedule;
- Ensuring that the library dissertation topic is one in which you have a particular interest, will meet the library dissertation requirements and is doable in the time you have available;
- Ensuring that the research project topic is one in which you have a particular interest, will meet the research project requirements and is doable in the time you have available;
- Forming a reading or learning group (set) with other participants (try to tackle together key texts and/or to comment on each other’s draft or formative essays), meet face to face when on campus and liaise electronically (e.g. through Blackboard) when off campus;
- Getting used to exploiting the library;
- Preparing or following-up carefully for each module, by working through the reading provided or meeting any other set task;
- Making a contribution to each session.

In other words, our conception of ‘curriculum’ is not something we do to you or devise entirely for you. It is a partnership between your efforts and ours. In the end, you frame your curriculum, exploiting all the resources available to you.

Groupwork
There are several reasons why we use group work as a teaching and learning method:

- It gives individual students the opportunity of articulating their thoughts in a situation which many find more comfortable than the whole class in which to express a point of view;
- It makes use of the time available in class by providing learning tasks, so that you get as much out of the session as possible;
- It provides you with an opportunity of drawing on your own professional experience, and of allowing you to share that experience with other students;
- It also allows you to share the results of your reading and other academic work with your fellow participants;
- It provides a context in which you try out and explore your understanding and get feedback on this from peers and tutors.
- It models a range of practice which you might consider drawing into your own teaching with more skill and confidence.

Depending on the activity in hand, there may be various specific tasks to be performed, and you should be prepared to undertake your share of them; some of these may be required parts of your coursework. Some groups might want someone to act as a kind of chairperson; groups might be asked to report to the whole class, and you might be asked to act as a rapporteur, summarising the key points of your group’s discussion; or groups might be expected to reproduce their ideas on a poster, and you might be asked to speak the group’s views.
Group work will put more responsibility on you both before and during the session, for your contribution will be vital to the group’s effectiveness.

**Discussion in class / Debates**

One good reason for using groupwork is that it offers a means of marshalling ideas and exposing them to the views of other students. The ability to sustain an argument orally as well as in writing is an important capacity that postgraduate students should acquire. Engaging with others in a structured, rational and evidenced conversation or debate to advance our collective understanding is also behind this teaching strategy. See it also as an opportunity which you seldom have to try your hand at speaking in the company of your peers and in which the way you say things does not have to be perfect.

Participating in class is one of the components of the partnership and ‘agreement’ we have with each other. Imagine what it would be like if no one said anything. We have, therefore, a responsibility towards each other to make a contribution.

An excellent way to test the validity of your ideas is to expose them to the views and knowledge of your peers through discussion and / or debate. But this also places a responsibility on everyone else in the class or group, firstly to provide the conditions of quiet and respect so that the speaker has a hearing; secondly, to listen attentively to what is being said; thirdly, to weigh it up, and form one’s own response; and lastly, to offer a spoken response if one is in a position to help the discussion forward. So while another member of the group is speaking is not the moment to lose your concentration; on the contrary, it is a demanding time, requiring all your intellectual efforts. Groups and individuals in them need to set their own rules and boundaries so that everyone can speak and contribute.

**Lectures**

You will encounter a few long lectures and many ‘mini-lectures’ or expositions by tutors. You will also have a few outside speakers, some very eminent in their field, giving ‘star lectures’. We use this latter mode to convey large ideas, important information, personal enthusiasm and expertise, to give an overview, to summarise main points, to provoke debate and so on. This offers an opportunity to observe many different teaching and lecturing styles at close quarters. Many such sessions will be interactive, needing your participation; in others the tutor may wish to be more formal and complete their piece before inviting questions. Whichever mode is adopted you need to think how you will turn it to your learning advantage. Has past experience shown that to engage with the material you really do need to be taking your own notes? Do you do this in a tried and tested manner or should you branch out into concept mapping or electronic notes? Or is your preferred way of learning, to listen and engage mentally? For all sessions, tutors/speakers should provide some form of note, electronically or in hard copy in advance, at the time or later; internal tutors will normally have posted their presentation in Blackboard in advance, so that you can decide if you want to print it out. Consider using a teaching free period to convene a study group to tease out the main ideas and messages from each session.

**Blackboard**

The programme uses a web-based Virtual Learning Environment (VLE) called Blackboard. A VLE is a password protected intranet that has a number of tools to support learning and teaching. Blackboard is a central part of teaching, learning, studying and communicating on the programme. You will be introduced to Blackboard during the first module and we will encourage you to familiarise yourselves with it before you leave the campus. When you are logged into Blackboard you will be able to:

- View important dates and deadlines
- View online or download an electronic version of this handbook
- Download relevant information and resources, including module outlines and teaching session notes
- Post messages to other students on the discussion board
- Read messages from the programme administrator on the discussion board
- Access other electronic resources and websites
- Submit summative assessments via Turn-it-In on Blackboard,
- Access PILOT – an information literacy programme for researchers.

If the programme administrator posts an important message in Blackboard, she will also send an email message instructing you to log into Blackboard. At other times, however, messages and materials will not be accompanied by an email alert. This means that you need to get into the habit of regularly logging onto Blackboard to check anything that is new. You will wish/need to check out Blackboard to look at reading lists, teaching notes etc., but you could also, for example, form and participate in virtual (electronic) learning sets to gain group support and momentum for your learning.

Because you will have access through Blackboard to a great deal of information, including teaching notes, we will only provide paper copies of some non-standard materials. The choice of whether or not to print a hard copy from Blackboard (either before or after the teaching) will be up to you. You will need to work out your own preferred mode of study and of keeping and annotating notes. Using Blackboard it is possible to study in a more ‘paperless’ mode if this is what you prefer.

One of your key tasks between module 1 and 2 is to test out your home access to Blackboard and to navigate around it to find and read the information already there.

**Reading**

For this programme, your own reading is absolutely crucial to the progress you make. It is through reading and thinking about what you read that you will develop at the required level. It is through your use of reading that your summative writing, library dissertation (PG Dip and MSc) and your research project (MSc) will gain the necessary rigour and soundness. We will be looking for evidence of wide and critical reading in your summative assignments. It is particularly important to undertake ‘foundation’ reading at the start of the programme so that you become familiar with the landscape of education as it relates to surgery.

**The Library and the Literature**

Many of you will want to use the Faculty of Medicine Library at St Mary's. You should find most of the titles your want in the Library. If it does not stock a title in which you are interested, let us know, so that we can consider putting in a request. This will help future students. Occasionally titles you want may be in libraries on other campuses and can be requested for a small fee. Different categories of books can be borrowed for differing periods, and some are for Library use only. Check term and out-of-term opening hours via the Library website. Many journals are available on line. Some of you will also have access to a good library in your hospital; others of you may know a good public library, which has a record of at least ordering and acquiring titles quickly for you. Do use all the library resources available to you.

The Library staff are extremely helpful. The Library (electronic and geographical) has good facilities for conducting literature searches. The Library provides access to much material on-line that you can access from anywhere over the web, using your own log in and password. Ensure that you follow up from your Library induction and that you have full registration and access to these electronic resources. Once registered you will be able to access on-line many key journals.

You should get in the habit of looking at what has been recently published. Tutors will suggest further reading, but these suggestions are necessarily limited and may not pick up your exact areas of interest; also new journal papers will come out after the reading list was prepared.

Try to take advantage of material that you come across or see referred to in your professional work. Keep a look out for any relevant reports.

**Note-taking from the literature and building bibliographies**

You will need to devise some method of keeping notes and accurate details of your reading. You should start straight away, seeking to evolve a method appropriate to your interests and learning style.
Whatever system you use, you will want to devise a means of rapidly accessing your notes at any time in the future. For this purpose, you might wish to file your notes alphabetically by title, or by author, or by key topics that appeal to you. Card files are a traditional, convenient way of making notes. They enable you to file your material so that you can quickly locate an item. They also encourage you to keep your notes brief and to the point. Many of you, however, will choose to use an electronic bibliographic tool that will save much time, e.g. for inserting references into your summative work as you write. The tools most widely used at Imperial are ‘Reference Manager’ and ‘EndNote’. Effective use of these will save you enormous amounts of time when writing assignments, and particularly when writing your dissertations (PG Dip and MSc). We strongly recommend that you become familiar with one of these programs and what it can offer. The Library runs courses about their use.

References
Right from the start, you should get into the habit of making a full reference of all material you come across in your reading, so that you can cite it in any work you produce.

Different styles of referencing are used, and you will encounter these during your reading. For your own work we firmly recommend the Harvard style of referencing, as follows:

For books:

Or for edited volumes:
Peyton, JWR (Ed) (1998) Teaching and Learning in Medical Practice; Manticore, Rickmansworth

And chapters in them:

Or for articles:
Bradley, P and Bligh, J (2005) ‘Clinical skills centres: where are we going?’ Medical Education, 39(7), 749-650

From these examples you can see that you need to record the following in your notes or bibliographic program: surname of author plus initials; date of publication; title of publication; title of book in which it appears (if it’s a chapter in a book); title of journal (if a journal article); volume/edition/page numbers (if a journal article); publisher and publisher’s location (if a book). Not every item you encounter will fall into this format, particularly reports and bulletins issued by national or international agencies, but these examples will enable you to ensure that you have a record in your notes of the key reference information. For web references, you must indicate the URL and when you last accessed it.

Every item that appears in your bibliography should be cited in your text (and vice versa). Direct quotes must be shown as such in the text and referenced, key theories and any paraphrasing of the work of others must also be similarly acknowledged and referenced. Ensure that quoting is done absolutely accurately (even to the extent of repeating syntactical errors). The way to do this in the Harvard system is simply to put the author’s surname and year of publication in brackets at an appropriate point in your text, normally at the end of the sentence before the full stop, like this (Stephens, 1990). When using quotations, page numbers should be given; mark references a, b, c etc. where the same author has various titles from the same year. Items in your bibliography should be listed alphabetically. Reference Manager, EndNote and similar programmes will simplify this process by ensuring consistency.

If you are used to a different system of referencing you may use it, as long as you are consistent and thorough. However, the use of ibid. and similarly archaic formats is to be avoided. Footnotes should only be used on the rarest of occasions. Inaccurate referencing and the use of archaic systems will have an impact on marks for summative work.
If you would like further guidance, Anglia Ruskin University offers a useful and comprehensive online guide to the Harvard System of referencing found at: liweb.anglia.ac.uk/referencing/harvard.htm

[Last accessed Sep 15, 2016]

**Writing Effectively**

Many of these points will be familiar to you and will seem to be a statement of the obvious. Nevertheless, we hope you find these notes a helpful reminder.

(a) Planning and Strategy
Before you begin to write an essay, report or dissertation, start reading and collecting notes on relevant texts and class sessions. Use reading lists and bibliographic searches to identify what you need to read.

For summative module work, start by identifying all aspects of your topic that you can think of. You will then need to plan an exposition, argument or story, in line with your title. You will also need to consider how you are going to give information to the reader and how you are going to discuss it (i.e. analyse, critique, conclude or reflect upon it). This is a dynamic process and you may need to discard certain aspects of your earlier thoughts, or to refine them so that they can fit into your developing theme/s.

After you have identified what you want to say in relation to your topic and your specific title, develop a structure for your piece of work. This should incorporate the sequencing of the points you wish to make so that each section of your argument/discussion is coherent and flows logically from one point to the next. Ordering your points in this way will enable you to develop a plan for your essay or report, providing a clear sequence of paragraphs. A traditional outline or a Mindmap can be a helpful means to develop a structure.

**Summative Writing**

For your summative module work, the question you tackle may dictate the format of the writing. But it will generally be useful to bear the following components in mind:

- **An introduction** in which you identify the topic and present your point of view, the structure of the piece and/or the thesis or main idea of the paper.
- **A description of the problem**, context or relevance of the subject matter
- **A short critiquing literature survey** of points of view on the topic, as background to the topic, issue or problem in question.
- **A clear structure** to and development of your discussion. Frequent and brief subheadings are very helpful.
- **A progressive character** to your discussion, all the time having an eye to your central theme(s) to ensure that there is a continual thread running through your piece.
- **Evidence** to support your idea or thesis.
- **Acknowledgement** of opposing points of view and their differences from your view.
- **A conclusion** that summarises your main arguments, restates your position or points to further work.

Your writing needs to be clear, coherent, as comprehensive as possible, relevant to the topic or issue in question and consistently argued. Remember that you are writing for others so that clarity is essential, as well as appropriate use of academic conventions. It is important that your point of view
comes across, not as opinion but as a justified judgement or reasoned argument, and that you show awareness of the relevant literature, appropriate evidence and analysis (see the grade criteria in the assessment section).

The way you present your ideas will determine the way they are received. You need to take utmost care with sentence construction and paragraph formation, and with grammar, punctuation and spelling. Number the pages. Use your word processor’s spell check! Do keep asking yourself: have I made my intended meaning precisely clear? Is what I have said ambiguous in any way? Is the evidence or reasoning for this assertion watertight? Does this word express exactly what I am trying to convey?

Tutors in their assessments of written work are looking for evidence of analytical ability, wide reading, logical organisation of material, and facility in the selection and justification of relevant material. They will be seeking evidence of originality and independence of thought (appropriately supported). And they will wish to see evidence of criticality in the way you discuss the published work you cite. The best essays will demonstrate clear understanding of the subject, logical argument covering most aspects of the topic, a definite but soundly-based point of view and clear conclusions drawn from an argument or case you have made.

Do not forget elementary matters like sentence and paragraph length. In general, keep control of your writing, so that the point of your sentences or paragraphs is transparent. If sentences cover several lines or you have fewer than two paragraph breaks to a page, alarm bells should begin to ring. Make sure you pay attention to word count (you can access this on most word processing programmes, for example through the ‘Tools’ menu) and record this at the end of summative work (you should not include your references in the count). Excessive deviations (anything much more than ±10% from stipulated word count) will be taken into account in the grade awarded.

Remember that good presentation and clear layout can help the clarity of your work. Work must be word processed (and have CID, module, ‘essay’ title, word count and page numbering clearly displayed).

Avoid:
- Colloquialisms
- Bald assertions. Deploy evidence or reasoned argument to back up your claims. Justify every claim you make. A claim may even be in the form of a word. For example, to say that ‘Smith recognised that …’ implies that you believe that what Smith ‘recognised’ is in fact the case. Unless you have further evidence up your sleeve to justify your faith in Smith, a better formulation would be ‘Smith believed that …’.
- Watch out for the way in which you use the term ‘the’. Avoid categorical expressions like ‘the quality issue’ or ‘the fact that’: such a usage pretends to a certainty, definiteness and a consensus that is not available to you. (Try ‘one issue of quality is …’; ‘there is a view that …’, ‘… is due in part to …’).
- A simple reference by name only to another writer is acceptable if you are drawing attention to his/her general style. However, if you are relying in any way on a specific idea of a writer or a definite claim or recommendation in a report or piece of evidence, then you should provide a specific reference, quoting absolutely accurately from the original. Provide the precise reference, including page or paragraph number(s).

Consider the following:
- Help the reader (in this case often a member of academic staff). If you are writing about a matter of professional policy or practice, you are likely to know more about the issue/local context you are writing about than your reader. Spell things out carefully. Do not make any assumptions about prior knowledge of matters of fact on the part of the reader.
• Academic writing should be transparent. That is to say, all the facts, evidence and reasons supporting the story you are making should be contained in the work itself. Aim for complete self-sufficiency.

• The quality of your work hinges on the substance of your discussion.

• Your points must be backed up by evidence or reasons. The more you supply, the stronger your argument. Aim to go beyond describing what is or has been the case, by providing an explanation, as you see things. Try to draw in, analyse and synthesise key concepts. Be prepared critically to evaluate familiar terms, policies and ideas. Do not take ideas for granted, even if everyone else currently seems to be in a consensus on an issue.

• Your argument will gain strength if you show that (i) you recognise counter-claims which might be made to the points you are making; (ii) you can in turn counter with further reasons or evidence those possible counter-claims. In this way, your essay/dissertation becomes a way of entering an ongoing public conversation and making your own distinctive but rational point of view. In this way, too, you demonstrate your ability to be reflective and self-critical in your thinking and reasoning.

• In developing your work, in marshalling your evidence or in building your argument, you will want to refer to other writers or reports. Where you are quoting, do not just throw a quotation at the reader but make its purpose absolutely clear. What do you want the reader to gain from the quotation? Is it evidence? If so, what information or point are you trying to add to your story by using the quotation? Or is it, perhaps, a point of view with which you agree? If so, why do you agree? If your view differs, on what basis do you disagree? Use direct quotation sparingly.

• One of the aims of this programme is to help you form links between ideas and professional practice or policy. Try, therefore, to back up your general ideas or statements by giving specific examples. Correspondingly, if you are describing a set of activities or arrangements or policies, stand back and give the reader a way of understanding or conceptualising what you are describing. Link up your concrete observations with relevant concepts and ideas.

• Conclude with a brief summary or, even better, a set of conclusions. A summary draws out the key points you have made. Conclusions should derive logically from what you said. In either case, they should tell a coherent story.

• If you have been writing about a matter of professional practice or policy, you may wish to offer a set of recommendations which could be implemented.

• Lastly, try to enjoy your writing: writing can be fun. If you are getting pleasure from it, there is a good chance your reader will as well.

Creating a Learning Community
Why is it important? Programme participants are not just a collection of individuals; together, they can become an active learning community (Lave and Wenger, 1991). In recent years, education theory has emphasised this social aspect of learning. It can be seen to be important for a number of reasons:

• Professional life is now seen to be in need of effective collaboration and sharing and good team work is seen as an important feature of good management;

• Working with others builds shared understanding and enhances what most individuals will experience by themselves;
• Interpersonal skills necessary for effective teamwork are not easily learnt from formal teaching. More important is direct personal experience of working in groups;

• The concept of the reflective practitioner (Schön, 1987) is now seen as an important part of professional life and development towards this can be enhanced by peers helping each other to gain a deeper self-knowledge;

• Much important learning is now seen to be less to do with adding on information transmitted through texts and lectures and more to do with a difficult process of personal and intellectual change, a process of giving up as well as taking up. This more emotional side of learning is often enhanced by personal relationships with fellow participants.

• If peer group activity becomes an important part of the programme it can give a sense of control, responsibility and ownership

• Finally, coping with a Masters programme – whether full-time or part-time on top of a busy professional life – is extremely demanding. Participants can support and encourage each other in many valuable ways, so making the programme experience more enjoyable and learning and assessment tasks more manageable.

References


What you can expect and need to do: (c) Research Planning

RESEARCH PROJECT AND DISSERTATION (MSc)
Carrying out a research project and producing a dissertation is an important part of the programme. Many students initially find the idea of writing a 10-15,000 words dissertation rather daunting, but later discover that this can be one of the most interesting, challenging and rewarding activities associated with gaining an MSc.

Some students may already know what topic they want to explore when they start the programme. Their own professional interests or the needs of their employers already point to a particular subject. Others have no idea at first, but develop a particular interest after they have had some teaching and start reading. Students are usually able to pursue a topic of their choice, refining this in discussion with an appropriate supervisor and having it considered by at least one other member of the programme team before the go-ahead is given for the research to continue. There will also be a pool of project topics proposed by the academics and clinicians involved in the programme. The process of research topic and supervisor selection/allocation is managed by the Programme Directors. Every effort is made to ensure that this process operates fairly and equitably. Occasionally, it may happen that an appropriate supervisor cannot be found for the student's first choice of research area, or that their first choice of supervisor has already taken on as many students as they can manage.

Regardless of the area you choose to investigate, you will need to think carefully about the most appropriate treatment or methodology for your research. Is there a body of data already available that you could examine and analyse, or will you have to collect data as part of your research? What issues and problems of confidentiality and ethical permission are involved? It will help if you consider such questions when you first start to think about a topic, rather than after you have already devoted much time and effort to a subject that subsequently proves not to be feasible.

To help you weigh up these issues, the taught component of the Research Project will build on your existing research methods knowledge and expand it as it applies to modern surgical research – including basic science studies, clinical studies, skills/simulation studies and outcomes research. A range of approaches will be covered so that you become familiar with different research traditions, including quantitative, quality improvement and from social sciences, and develop your ability to make informed choices between different designs and methodological instruments. This overview will be balanced with an iterative process of research proposal design. After taking part in this taught component, students will finalise a research plan, obtain necessary research ethics approval and then conduct the planned research and produce a 10-15,000 word dissertation under the guidance of a supervisor with planned early and late stage reviews.

Your research proposal will be discussed in further detail during your first supervision meeting. This discussion will, importantly, include ethical considerations for you project and the process of ethical approval. Depending on the nature of your project, you will need to apply through one of three bodies: (1) the NHS’s IRAS, (2) Imperial College’s Research Ethics Committee (ICREC) (http://www3.imperial.ac.uk/researchethicscommittee) or (3) Imperial’s newly constituted Medical Educational Ethics Committee (MEEC). It is essential that you do not start collecting data until your proposal has been accepted by your supervisor, as this risks you putting in time and effort to work that does not ultimately proceed along these lines. You will also be responsible for submitting progress reports in late April and late June to help you balance your project workload over the year.

Examples of possible areas include, but are not limited to: Principles of Surgery (e.g. Calculation and presentation surgical risk; Innovative ways for surgical training); Surgical Education (e.g. Simulation-based Care Pathway Modelling; Public Engagement and Outreach); Improving Safety, Implementing Change (e.g. Comparative effectiveness of interventions to increase surgical safety: a systematic review; Quality of surgical leadership across complex care pathways: Prospective ethnographic evaluation); Interventional Technology and Imaging (e.g. Innovative Approaches to Contextualised Simulation; Augmented Reality in Surgery); Bariatrics (e.g. Appetite levels with high
and low GI diet; Review of evidence of effectiveness for bariatric surgery); Colorectal Surgery (e.g. Appropriateness of testing for hereditary bowel cancer – a regional study; Outcomes following sphincter repair); Orthopaedic Surgery (e.g. Simulation in ACL surgery - the learning curve; 3D printing in orthopaedic planning); Oesophago-Gastric Surgery (e.g. Trends in management of Achalasia in the UK; Reflective practice intervention to improve proficiency gain curve); Vascular Surgery (e.g. Robotics and imaging technologies in vascular surgery; Metabolic profiles of vascular disease states).

In summary, you need to allow yourself plenty of time to:

- Identify a topic
- Carry out a review of literature and previous research in this area
- Discuss it and the treatment or methodology, with your supervisor
- Obtain all necessary study and ethical approvals with oversight from your supervisor
- Conduct any empirical research
- Analyse data
- Write the first draft
- Discuss the draft/s with your supervisor
- Make final revisions
- Print, check and bind the dissertation
- Present your dissertation by September 15th of year 2

The calendar of deadlines in Part 1 provides further information about timescale and how this process integrates with the research project.

**Acquiring a Supervisor and how the Supervision Process works**

Either:
Students may approach a potential supervisor before, during or after the Research Methods module. Any supervisor agreeing to ‘take on’ a student will inform the programme directors of this, and the topic of the research.

Or

Students wishing the programme directors to ‘allocate’ them a supervisor will normally wait until after they have submitted their research plan, as above, on the basis of which the programme directors will suggest possible supervisors for the student to contact.

As mentioned previously, the role of the Supervisor is to:

- Discuss and advise about suitability, scope, research questions, literature searches, methods, analysis and writing up for the research project
- Review and advise on applications for ethical approval of research project
- Read and comment on a draft of the dissertation, if submitted in a timely manner (as arranged)
- Provide timely responses and feedback to students on queries and drafts
- Are available to their supervisees for at least three meetings, to include one near the start of the project and one near the end.
- Mark dissertations

The responsibilities of the student are to:

- Prepare an initial research plan that forms the basis of discussion for the first meeting with their supervisor
- Plan, conduct, write up and bind the research, with the assistance of advice and guidance from their supervisor
- Seek ethical approval for their research proposal with oversight from their supervisor early on in the project
• Adhere to deadlines and keep their supervisor informed of any unexpected difficulties in their work
• Arrange meetings with their supervisor. The onus is on the student to initiate these directly with the supervisor.
• Keep in touch about progress by email.

Presentation of the Dissertation

Other sections of this guidance cover topics such as academic writing styles and presentation of references or bibliography. Please look at other dissertations for guidance. If presentation guidance here does not address a specific point, please use your own judgment to come up with a solution and we will accept this within reason.

In presenting your dissertation you should:

• Complete and include our dissertation cover sheet (on your electronic version only)
• Provide a:
  - Title page that includes your name, the dissertation title, the award, the year, and a short statement explaining the work is yours or otherwise appropriately referenced
  - A complete table of contents with corresponding page numbers
  - An abstract (a brief and pithy précis of no more than 300 words)
• Achieve a word count that is between 10-15,000 words (no buffer). Appendices do not contribute toward your word count nor do title pages, abstract, tables of contents, acknowledgements, reference list, and index. Diagrams, tables and the like summarising your own data will not contribute toward the word count. Park any non-essential information in the appendix
• Keep your line spacing between 1.5 – 2
• Set a legible font and font size. We suggest a sans serif font (e.g. Arial) at 12 pt
• Number all pages using Arabic numbers, starting with the Table of Contents
• Remember to number tables or figures and to show their source (where relevant)
• Check that all references are in the bibliography and cited correctly in the text
• Give a list of abbreviations used (if necessary)
• Ensure you have: proofread and corrected errors, adhered to copyright laws, sponsorship agreements, and patient/research participant confidentiality/anonymity

Submit an electronic copy on Blackboard under the MSc in Surgical Innovation Dissertation Submission area no later than 14th September 2018. Students are encouraged to submit a draft version to Turn-It-In (on BB) to review their referencing practice prior to final submission.

Supply two hard copies, one of which should be cloth covered in purple. The binding should have your name, year of submission and the course title (hard copies will be accepted up until 21st September 2018).

Address these to:
Susan Clark
Postgraduate Taught Course Administrator
Room 8, Clinical Skills Centre
Paterson Centre, St Mary's Hospital
Imperial College London
London, W2 1BL.
Imperial College London - List of Binders

All the binders listed below offer a theses binding service. Inclusion on the list offers no guarantee that the work will be carried out to the correct specification. It is the responsibility of the student to ensure that the work is carried out to the correct specifications.

**BLISSETT BOOKBINDERS**
3 Roslin Road, London W3 8DH  
Tel: 020 8992 3965 (Nr Acton Town Tube)  
Same Day/48 hour service  
Copying Service (Colour and B&W) All to specification.  

**KEYPOINT BOOKBINDERS LTD**
Unit 8, Balmoral Grove, Islington, London N7 9NQ  
Tel: 020 7609 1050 Fax: 020 7609 1020  
Folding, gathering, perfect binding, thread sewing, case binding, journal binding, ring binders.

**R G SCALES DOCUMENT CENTRE**
92 Southwark Bridge Road, London SE1 0EX  
Tel. 020 07928 9738, Email: bookbinder@mail.com  
Copy from disc, E-mail, or typed, copied on digital B&W, Colour copiers. All types of binding, all to specifications.

**COLLIS-BIRD & WITHEY**
1 Drayton Park, London N5  
Tel: 020 7607 1116  
Will do fast service, Photocopying facilities available, typing free delivery. All to specifications.

**A J B BOOKBINDING CO LTD**
5 Athole Terrace, Bensham Grove, Thornton Heath, Surrey CR4 4NA, Tel: 020 8653 5877 (Will do fast service)

**AVALON ASSOCIATES**
23 Dunmore Road, Chelmsford, Essex CM2 6RY  
Tel.: **01245 462685**

**GRAYS (BOOKBINDERS) LTD**
Unit 5, 24 Willow Lane, Mitcham, Surrey CR4 4NQ  
Tel: 020 8640 1449

**THE WYVERN BINDERY**
56-58 Clerkenwell Road, London EC1M 5PX  
Tel: 020 7490 7899

**THE PRINTING CENTRE**
30 Store Street, London WC1E 7QD  
Tel: 020 7636 8723 Fax: 020 7363 8726  
Guaranteed turnaround, copying service available B&W and Colour from disk or hard copy. All to specification.

**OTTERSHAW BOOKBINDERS**
42 Hare Hill, Addlestone, Surrey KT15 1DT  
Tel: 01932 845976  
Will do fast service, free delivery.

**J MUIR & CO**
64-68 Blackheath Road, Greenwich, London SE10 8DA  
Tel: 020 8692 7565 Fax: 020 8692 2072 Email: jmuirbookbinders@yahoo.com  
Will do fast service, all types of binding to specification.
What you can expect: (d) Assessment, Grades & Degree Classification

Assessment is an integral part of the learning cycle. Completion of assessment should help to reinforce and clarify learning, as well as demonstrate the quality of that learning. From the perspective of learning, full benefit is unlikely to be derived from a module until some reflection and assessment has taken place, because assessment often has a formative element that contributes to understanding and knowledge. The programme assessment takes a variety of forms, balancing issues of reliability, feasibility, fairness, variety and validity, within the constraints of university regulations.

SUMMATIVE ASSESSMENT
Table 1 on Part 1 details the various module summative assessments, with deadlines as specified in the Teaching Dates and Other Deadlines table. Typically, the student-written elements require demonstration of knowledge of relevant literature and evidence, critique, application and use of theory, concepts and evidence and the demonstration of sound and reasoned judgement. Summative assignments may also require critique and reflection on one’s own practices. The prose will be expected to conform to an academic style and include full referencing and acknowledgements – see later section.

The dissertation is the culmination of a period of eight months of work, constituting a large component of the degree. The dissertation is the write-up of your research project and should be 10-15,000 words long. Detailed guidance about dissertation requirements, writing and formatting will be given when the taught component of the research project is taken; some outline points are included in another section.

All written summative assessment is double marked (marked by two people), using explicit criteria and a mark sheet system, and with the second marker being ‘blind’ to the mark of the first. Feedback on work submitted to deadline for the core modules and speciality stream modules will be given to participants within a reasonable timescale. Although a specific mark will not be given, an indication of the likely grade range will be provided. These are indicative ranges only, and may undergo revision based on any moderation needed at Examination Board. Irrespective of the nature of this feedback, the assessment, normally, cannot be revised or re-submitted at this stage and will go forward to the Examination Board. The feedback may assist participants in the preparation of their next summative essay assessment. The final grade for each module, including the summative assessment component, will be released by Registry after external examining has taken place.

In order to allow time for your assignment to be marked and feedback given, it is essential that work be submitted by the stated deadline.

When you submit summative work remember to include detail about module and title, your CID (Imperial identification number) only (not your name) and the word count of the piece. You should receive a receipt/acknowledgement - please follow-up if you do not receive one. Always keep a complete copy of work you submit in case of any loss. All submitted work should be word processed. Handwritten submissions will not be accepted.

COURSEWORK
Coursework will be used on some modules and will count towards the overall module mark. The coursework may take various forms including formative review tests, group work (oral and written), individual work (oral and written) and demonstration of skills.

Coursework will be double marked where this is appropriate and feasible (but, for example, coursework such as an electronically administered formative test would be ‘machine’ marked). Peer marking may also take place. The module outline produced by the module co-ordinator and issued before or at the start of the module will give guidance about what is required.
The Research Methods module culminates in presentation and submission of a research proposal from each participant that together form a ‘hurdle’ for the module. Attendance and completion of both of these items constitutes completion of the taught component of the Research Project. These need to be completed but do not generate a counting grade or mark. Their importance lies in the foundation that they provide for your dissertation. They are likely to be the basis for discussion at a meeting with your supervisor, after which you can finalise your research plan. Proposals which are inappropriate or contain inadequate detail may be deemed to need further work before the research project proper can commence.

**VIVAS**
Following standard Imperial practice, vivas form part of the range of assessments approved for the programme. Although vivas are not routinely employed in the programme, students whose marks fall on a borderline between grades may be required to defend their dissertation and other work viva voce.

**ENSURING YOU MEET DEADLINES AND ASSIGNMENT REQUIREMENTS**
The work required to be undertaken in the programme is challenging and time consuming. For busy professionals such as yourselves, it will be important that you plan your time accordingly and pay careful attention to the requirements for assignments. If you need guidance on assignment requirements, in particular, please contact the module organiser for clarification. You should also contact the course directors and/or module organiser if you find you are encountering serious problems keeping to deadlines. Where serious and independently corroborated mitigating circumstances are involved (e.g. serious illness or bereavement), reasonable accommodations can be discussed and agreed. Below are a links where you can find the College procedures around mitigating circumstances, as well as the form to complete should you need to follow this process.


http://www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/

However, where there are no mitigating circumstances, the course directors, in keeping with College regulations, have the right to impose penalties for any late work (i.e. coursework, essays, dissertation) or work that does not meet the stated requirements of the assignment as follows:

A default penalty of zero applies for late work. This penalty can be reduced, at the discretion of the course organiser. In the case of the Surgical Innovation programme, a 5% penalty will be levied for late work, with an additional 5% penalty for every additional week past the deadline. At one month past the deadline, the work will not be marked and will be recorded as a fail.

**Word count deviation**
A 5% penalty may be levied for work outside that stated word count range. Every additional 10% above/below the set word count will incur 5% penalties. If the work is 50% above/below the set word limit, it will not be marked and will be recorded as a fail.

**PLAGIARISM, PLAGIARISM DETECTION SERVICES, SCIENTIFIC MISCONDUCT, ETHICAL PERMISSION, AND INTELLECTUAL PROPERTY**
Plagiarism and scientific and ethical misconduct are reprehensible and will not be condoned. Severe action may be taken against proven perpetrators. However, it is our belief that few people wilfully plagiarise or seek to deceive. It is important that you understand what constitutes a problem or offence. We will have opportunities to learn about referencing practice during the Induction day from the campus Librarians and via the now compulsory online Plagiarism Awareness course provided by the Graduate School for Master’s students.
Plagiarism can be simply defined as: ‘taking someone else’s thoughts and writings and presenting them as your own’ (Baillie, cited in ‘Learning to Learn, Imperial College London, page 43, 2005-6 edition). It is passing someone else’s work off as your own, be it their ideas or exact words, and be they those of fellow students, colleagues, anonymous web authors or famous researchers. Plagiarism is most normally avoided by placing words that are not your own in quote marks and referencing the source; even if exact words are not used, the source of ideas originating with others, or which closely paraphrase the work of others must be acknowledged through accurate and sufficient referencing.

You have access to an on-line information literacy guide constructed by Imperial, PILOT, that provides much more advice about these elements. The programme seeks to educate participants about what plagiarism is and how to avoid it and about other related topics. You are strongly encouraged to take the time to use it. Other advice from the Library can be found at: www3.imperial.ac.uk/library/subjectsandsupport/plagiarism/pgtaught

Work that is submitted electronically will be subject to plagiarism detection services such as Turn-It-In (http://turnitin.com). On at least the first assignment submission, students will be allowed to submit a draft to Turn-It-In so that they may review and revise their work in light of Turn-It-In feedback before final submission. The Turn-It-In Originality Report will be interpreted by markers and any remarkable findings fed back to students. College policy will be followed where plagiarism is concerned. It should be noted that the College takes a very hard line around plagiarism. Post-graduate students are held to an especially high standard because of their experience in academia and the workplace. For more information, please visit the following link:


Scientific misconduct most usually arises when data are invented or falsified or research is carried out under false or unethical premises. All these types of actions must obviously be avoided. Care will need to be taken in planning research projects involving people. Not least because of the time it can take to obtain ethical waiver or clearance, it is imperative to take this issue seriously; the time involved in obtaining ethical permission is part of the reason why you are asked to consider your research plans as early as the summer of the first year for part-time students. Obtaining ethical consent for work is the responsibility of students.

Imperial also issues guidance on intellectual property and authorship that are intended to inform you of your rights and responsibilities in publishing any research you complete as an Imperial student. This guidance is included in Appendix 4.

MARKING, GRADES AND DEGREE CLASSIFICATION

Summative assessment and the dissertation are blind double marked (in the sense of one marker not knowing the mark of the other - see above), but anonymous marking will not always be possible, as the unique context of each participant will render authors identifiable to some markers. The programme seeks to ensure fairness, transparency and reliability by numerous means, including having a range of markers summatively assess each candidate (through marking on different modules). The programme also uses mark sheets and grade criteria, which are made known to students by publication in this Handbook. Coursework marking will adopt such safeguards as are feasible.

The following grading rubric describes the broad level of achievement represented by each criteria for each grade level. These are irrespective of particular emphasis within modules, demonstration of the specific learning outcomes for each module or the particular type of assessment used.
<table>
<thead>
<tr>
<th></th>
<th>Ungraded: 0-39% (Fail)</th>
<th>Grade D: 40-49% (Fail)</th>
<th>Grade C: 50-59%</th>
<th>Grade B: 60-69%</th>
<th>Grade A: 70-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Understanding &amp; Relevance</strong></td>
<td>Presents very little evidence of, or misunderstandings of, main knowledge, concepts, theories, issues, policy, ideas and practice relevant to the project; makes very few or no connections between them.</td>
<td>Presents limited evidence of, or flawed understandings of, main knowledge, concepts, theories, issues, policy ideas and practice relevant to the project; makes few or simple connections between them.</td>
<td>Presents modest grasp of main knowledge, concepts, theories, issues, policy ideas and practice relevant to the project and makes some relevant connections between them.</td>
<td>Presents a good grasp of main knowledge, concepts, theories, policy (when applicable), ideas and practice relevant to the project and makes salient connections between them.</td>
<td>Presents an excellent grasp of main knowledge, concepts, theories, issues policy, ideas and practice relevant to the project; and makes interesting and/or compelling connections between them.</td>
</tr>
<tr>
<td><strong>Integration &amp; Application</strong></td>
<td>Demonstrates very little evidence of having read, or integrated, central texts and research findings; scarcely relates these to the project.</td>
<td>Demonstrates a limited, fragmented knowledge of the literature and research findings; presents few and/or limited applications of these to the project.</td>
<td>Demonstrates a modest, partially integrated knowledge of the basic literature and research findings; presents some modest applications of these to the project.</td>
<td>Demonstrates a well-integrated knowledge of the basic literature and research findings; presents pertinent applications of these to the project.</td>
<td>Demonstrates an excellent, well-integrated knowledge of the basic literature and research findings; presents convincing applications of these to the project.</td>
</tr>
<tr>
<td><strong>Critical use of literature</strong></td>
<td>Demonstrates very little or no awareness of differing viewpoints, and of relations between them.</td>
<td>Demonstrates limited awareness of differing viewpoints, and of relations between them;</td>
<td>Demonstrates modest awareness of differing viewpoints, and of relations between them.</td>
<td>Demonstrates awareness of differing viewpoints, and of relations between them. Is familiar with main texts and findings; presents some critique but is not incisive.</td>
<td>Demonstrates excellent awareness of differing viewpoints, and of relations between them. Is widely read, and is critically incisive.</td>
</tr>
<tr>
<td><strong>Independence</strong></td>
<td>Demonstrates very little or no independence of thought; accepts as given ideas and findings from the educational literature and research.</td>
<td>Demonstrates little independence of thought; accepts without question most ideas and findings from the educational literature and research.</td>
<td>Demonstrates modest independence of thought; questions some ideas and findings from the literature and research; shows an ability to generate practical solutions.</td>
<td>Demonstrates independence of thought; routinely questions ideas and findings from the literature and research; shows an ability to generate robust solutions.</td>
<td>Demonstrates independence of thought and argument; challenges ideas and findings from the literature and research; shows an ability to generate rigorous solutions; is creative, innovative &amp; goal-oriented.</td>
</tr>
<tr>
<td><strong>Reflection and evaluation</strong></td>
<td>Presents very little or no evidence of reflection and evaluation of own and others’ scholarly practices.</td>
<td>Presents little evidence of reflection and evaluation of own and others’ teaching practices.</td>
<td>Presents modest and/or unclear evidence of reflection and evaluation of own and others’ teaching practices.</td>
<td>Presents clear evidence of reflection and evaluation of own and others’ teaching practices.</td>
<td>Presents strong evidence of complex, insightful reflection and penetrating evaluation of own and others’ teaching practices.</td>
</tr>
</tbody>
</table>

Dissertation/Summative Assessment Grading Rubric

PG Cert / PG Dip / MSc in Surgical innovation September 2016 (Susan Clark)
| Critical and structured argumentation          | Submits work with very little or no structure; develops few or no arguments, presented arguments are flawed not sustained or are mutually contradictory; presents very little or no discussion of the work. | Submits work with little structure; develops weak arguments, and/or the arguments are not followed through; presents little discussion of the work as a whole. | Submits work with an adequate structure; develops and sustains some modest arguments; presents some discussion of the work as a whole. | Submits clearly structured work; develops clear and sound arguments with some defence but limited evidence of creativity; presents a substantive discussion of the work as a whole. | Presents rigorously structured work; provides lucid, cogent and sophisticated arguments that are well substantiated, defended and sustained; presents a thorough and critical account of the work as a whole. |
| Technical accuracy* of presentation           | Considerable error in level of technical accuracy in written work | Some errors in level of technical accuracy in written work | An acceptable, if fairly basic, level of technical accuracy in written work | Considerable accuracy and correctness in technical presentation in written work | Very few flaws in accuracy and correctness in technical presentation in written work |
| Research Methods                              | Makes very little, or inappropriate, use of research and analytical methods; very poor write-up and organisation, makes it difficult for readers to discover what was done and found in the project. | Makes limited use of research and analytical methods; poor write-up and organisation: makes it difficult for readers to judge the quality and value of what was done and found in the project. | Makes use, without major errors, of standard research and analytical methods; adequate write-up and organisation: makes it possible for readers to evaluate the quality and value of the project. | Makes good use of appropriate research and analytical methods; competent write-up with good organisation: makes it easy for readers to evaluate the quality and value of the project. | Makes excellent use of well-chosen research and analytical methods; comprehensive write up with meticulous organisation: convinces readers of the high quality and/or value of the project. |

*Technical accuracy is taken to include: punctuation, essay organisation, paragraph and sentence structure, spelling, tone, word usage, referencing
Marks and grades for each module will fit the following pattern, or be converted/collated into it as necessary, to produce one grade for each of the seven required components of the degree (i.e. six taught componenet and the research component). The following scale will be used in module marking.

**Module Marking Grades**

<table>
<thead>
<tr>
<th>Module Grades</th>
<th>Percentage equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>70-100%</td>
</tr>
<tr>
<td>B</td>
<td>60-69%</td>
</tr>
<tr>
<td>C</td>
<td>50-59%</td>
</tr>
<tr>
<td>D</td>
<td>40-49%</td>
</tr>
<tr>
<td>Ungraded</td>
<td>0-39%</td>
</tr>
</tbody>
</table>

The overall degree classification will be calculated as follows:

<table>
<thead>
<tr>
<th>Degree class</th>
<th>Method of calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distinction</td>
<td>A distinction may be awarded when a candidate has achieved an aggregate mark of 70% or greater across the entire programme AND has obtained a mark of 70% or greater in each element with the exception of one element AND has obtained a mark of 60% or greater in this latter element.</td>
</tr>
<tr>
<td>Merit</td>
<td>A merit may be awarded when a candidate has achieved an aggregate mark of 60% or greater across the programme as a whole AND has obtained a mark of 60% or greater in each element with the exception of one element AND has obtained a mark of 50% or greater in this latter element.</td>
</tr>
<tr>
<td>Pass</td>
<td>Students must pass at least three of the modules with a pass mark of at least 50% each. Compensation for marks of individual components within elements is acceptable as long as no mark below 40% is accepted as a condoned pass mark. No aggregate module mark of less than 45% will be considered as a condoned pass.</td>
</tr>
<tr>
<td>Fail</td>
<td>Any grade combination worse than that required for a pass</td>
</tr>
</tbody>
</table>

Where no mitigating circumstances are present, candidates whose work has been failed on first attempt at the Exam Board will normally only be credited with a bare pass on re-entry to the examination. Normally candidates re-entering the exam are not eligible for a merit or distinction of their degree.

**In Summary**

The coursework for each module has its own deadline, normally falling while the module is still being taught. Summative assessment for each module should be submitted within the 2-3 month deadlines outlined in an earlier section. The dissertation is due on 14 September of Year 2. All late submissions must be agreed, before the submission date, with the course organisers and may incur marking penalties. Normally, any work not submitted by 14 September will be recorded as a Fail.
Summative Assignment Mark Sheet

Student CID .................................................................
Core Module 1 2 3 4 5 / Option Module Title...........................
Assignment Title, if there was a choice
Marker: Name .......... Signature..............

Instructions
1. Please enter comments under the headings below.
2. Then reach an overall judgement about the quality of the work, using the grade criteria to guide your judgement. 50% or more represents a pass mark.

<table>
<thead>
<tr>
<th>Please tick appropriate box</th>
<th>Grade: Ungraded 39% or less</th>
<th>Grade (fail) 40-49%</th>
<th>Grade 50-59%</th>
<th>Grade 60-69%</th>
<th>Grade 70-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please give whole % mark</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments

Understanding of concepts/ideas/theories/context/policies relevant to the topic

Integration and application of knowledge, theory, policy and practice to the topic:

Critical use of the literature (awareness of differing viewpoints and relations between them):

Independence of thought and argument (challenges ideas and findings from the literature and research, generates rigorous, creative solutions):

Reflection and evaluation of own and others’ teaching practices:

Critical and structured argumentation:

Technical accuracy of presentation:

Word count:

Overall Comments:
Dissertation Mark Sheet

Student ............................................................... Student CID .................................

Dissertation Title ........................................................ ...........................................................

Marker Name ................................................ Signature........................................................

Instructions
3. Please enter comments under the headings below.
4. Then reach an overall judgement about the quality of the work, using the grade criteria to guide your judgement. 50% or more represents a pass mark.

<table>
<thead>
<tr>
<th>Grade:</th>
<th>Grade: D</th>
<th>Grade: C</th>
<th>Grade: B</th>
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<td>40-49%</td>
<td>50-59%</td>
<td>60-69%</td>
</tr>
</tbody>
</table>

Please tick appropriate box

Please give whole % mark

Comments
1. Presentation of research question, area or problem, showing a clear rationale and describing the personal and/or institutional position
2. Understanding, application and integration of concepts/ideas/theories/context/policies relevant to the project context
3. Critical use of the literature (limitations of knowledge/theory, awareness of differing viewpoints and relations between them), including scope of bibliography:
4. Justification, discussion and description of project design, methodology, methods and analysis
5. Appropriate presentation and evidenced discussion of results with appropriate conclusions drawn
6. Identification of strengths and weaknesses of project
7. Implications of the research for future studies and relevant stakeholders
8. Critical and structured argumentation:
9. Reflection on research and role as researcher
10. Technical accuracy of presentation (including bibliography and referencing):
11. Word count compliance (taken from tally in dissertation, excluding appendices)
12. Overall Comments
What you can expect: (e) Pastoral and Academic Support

All programme personnel will endeavour to respond promptly to matters you raise. We all use e-mail as our main initial means of contact and ‘Out of Office’ messages when we are actually absent for a lengthy period time. If you receive an ‘Out of Office’ message, then please contact an alternative member of the programme staff. Please also contact an alternative member of the team if your matter is urgent and you have not heard back from your first contact for any reason – we all receive several tens of e-mails every day, some people work part-time, are clinicians etc, so do please make reasonable allowance for this.

Remember all day-to-day queries, for example about dates, absences, deadlines, requirements, or summative assessment submission, should be directed towards the programme administrator by e-mail. These will be dealt with directly or passed on to the appropriate person. However, please remember this handbook has many of the answers to this type of query! For other matters please read on.

Personal Tutor

Your year group has a single named personal tutor – see Part 1. The personal tutor is there for you to use as needed about matters that you do not wish to take to module or programme organisers and for any pastoral matter that may be troubling you. In practice pastoral matters will often have an impact on academic performance, but a confidential discussion of the pastoral matter may point to ways of dealing with its impact on academic matters. The personal tutor may be able to offer the advice you need or may suggest you seek support elsewhere in the College or beyond.

The types of things you might discuss with your personal tutor could include; difficulties in coping with workload; changes in personal/work family circumstances that are having an impact on your work; concerns that you may be about to fail a particular module; problems with other people associated with the programme; problems with studying etc. See your personal tutor as your first port of call if you have any issues or problems you wish to share that cannot be resolved by other simple, direct means. If you are willing for your tutor to share your issue or problem with others this may often aid resolution.

Your personal tutor will make every effort to offer a session during every module, at a time when you do not have teaching. The tutor is available for short, bookable appointments during modules. The session/s when these can be booked will be indicated on module timetables. Please make bookings in advance through the programme administrator. When you need to discuss a matter that cannot wait for the next module, e-mail will often be the best means of contacting your personal tutor.

Programme Directors

Either Professor George Hanna, Mr Christopher Peters, or Dr Fernando Bello will also be available for short bookable appointments during modules. Again, please arrange with the programme administrator. You may of course raise any matter that you wish. If you need to discuss matters much more related to academic aspects, for example aspects of option module choice or early ideas for a research project that could not be considered in a class session, these would be better discussed with Roger or Kirsten than your personal tutor.

Occasionally your personal tutor or the programme directors may be proactive in raising something with you.

Disability Matters

We encourage students with any form of disability to disclose it to the programme organisers and/or personal tutor as early as possible and discuss with us what support is available. We also encourage you to inform or let us inform all staff associated with the programme. In this way everyone can endeavour to ensure that we take any additional anticipatory action that may be needed to make reasonable adjustments to assist your study. For example, if you are dyslexic we would encourage/arrange automatically for large font printing or printing on a particular colour of paper.
The best way of finding out about College-wide support for students with a disability is to contact your local Disabilities Liaison Officer or the College Disabilities Officer— for contact information see Part 1. The College also asks that we include the following information in your Student Handbook regarding its support for students with disabilities, specific learning difficulties or long-term health issues:

“At Imperial College we recognise that studying at university can be a challenge, especially if you have a disability. We are keen that you have every opportunity to fulfil your potential and graduate with the degree you deserve. It is therefore important that you let us know about any disability, specific learning difficulty or health problem as soon as possible so that we can give expert advice and support to enable you to do this.

Some people never think of themselves as having a disability, but students who have experienced any of the issues listed below have found that a little extra help and support has made all the difference to their study experience.

- Specific learning difficulties (such as dyslexia, dyspraxia, AD[H]D)
- Autistic spectrum disorder (such as Asperger’s)
- Deafness or hearing difficulties
- Long term mental health difficulties (such as chronic anxiety, bipolar disorder, depression)
- Medical conditions (such as epilepsy, arthritis, diabetes, Crohn’s disease)
- Physical disabilities or mobility impairments
- Visual difficulties

Where to find help:

1. Your Disability Liaison Officer (DLO) Dr Michael McGarvey (m.mcgarvey@imperial.ac.uk, Variety Wing Floor D, Room 3, St Mary’s Campus, Norfolk Place, London W2 1PG, Tel: 020 7594 9035) is your first point of contact within your department and is there to help you with arranging any support within the department that you need. The DLO is also the person who will apply for Special Examination arrangements on your behalf. You need to contact him without delay if you think that you may need extra time or other adjustments for your examinations. http://www.imperial.ac.uk/student-records-and-data/for-current-students/undergraduate-and-taught-postgraduate/exams-assessments-and-regulations/special-examination-arrangements/

2. Disability Advisory Service: http://www3.imperial.ac.uk/disabilityadvisoryservice
The Disability Advisory Service works with individual students no matter what their disability to ensure that they have the support they need. We can also help if you think that you may have an unrecognised study problem such as dyslexia. Our service is both confidential (information about you is only passed on to other people in the university with your agreement) and individual in that any support is tailored to what you need.

Some of the sorts of things we can help with are:

- Being an advocate on your behalf with others in the College such as your departmental liaison officer senior tutor or exams officer, the accommodation office or the estates department
- Checking that your evidence of disability is appropriate and up-to-date
- Arranging a diagnostic assessment for specific learning difficulties
- Help with applying to the College for the cost of an assessment
- Help with your application for the Disabled Students Allowance (DSA) see below
- Helping students not eligible for the Disabled Students Allowance in obtaining support from other sources
- Help with arranging extra Library support
- Supporting applications for continuing accommodation for your second or later years

3. Disabled Students Allowance: http://www.imperial.ac.uk/disability-advisory-service/support/dsa/
Students who are home for fees and who have a disability can apply for a grant called the Disabled Students Allowance which can pay any extra costs that are a direct result of disability. This fund is not means-tested and is also a grant not a loan so any home student with a disability can apply and will not be expected to pay it back. Remember students with unseen disabilities such as mental health difficulties, dyslexic type difficulties or long term health problems are also eligible for this fund.

Information originally provided: May 2011

Query about using Blackboard?
Please e-mail the course administrator.

Module Organisers and Tutors
Module organisers may be the best person to approach if you have a specific query about a module. Occasionally you might want/need to follow up something with the tutor for a particular session.

Dissertation Supervision
You should read the relevant portions about the dissertation and research project to find out more about this aspect and the support we offer.

General Study Support
The College has produced a study and learning guide specifically tailored to Master's students. You will receive this early on in your programme. There are sessions within early modules that address particular aspects, such as using the Library, Blackboard, and academic writing. This handbook also contains considerable advice about making the most of your studies, particularly in the section on 'Learning and Study'. There are also College-wide services - see contact details in Part 1.

Problems and Complaints
Please see Part 2 for information about how you can make observations and suggestions about developing the programme. We welcome these. There is a normal structure for this based around standard evaluation, student representatives, the staff student liaison committee and informal feedback to staff.

Please try first of all to raise problems and complaints directly with the most obvious person in a position to respond to the particular matter. If you do not wish to do this, or if there is still a problem, then any matter can be raised with the programme organisers or, if you do not wish to discuss it with them, with your personal tutor, and/or your student representative. In the event that something cannot be resolved within the programme team, then please approach other College staff, using the contact list in Part 1, starting with the Divisional Director of Postgraduate Studies.

Other College Services
These are mentioned in Part 1, with a summary of what they offer. Do look at this list and make use of the services as needed, either after discussion with programme personnel or on your own initiative.
What you can expect: (f) Programme Development, Evaluation and Quality Assurance

The Role of Students in Programme Development and Evaluation
We welcome your suggestions about how the programme can be improved. We want to hear what you think about all aspects of the programme. There are many ways in which you can make your views known, these include:

- Informal feedback to the programme and module organisers and to all other staff associated with the programme usually end of module
- Completing electronic evaluations for each module: daily and weekly, Discussing your thoughts with the student representatives, so that they can carry them to the staff student liaison meeting (SSLC)
- Having them voiced by student representatives at the SSLC.

We shall make every effort to be responsive, within the confines of programme’s regulations.

We believe programme development best occurs in a culture that is open to suggestions and discussion and in which the reasons for actions and decisions are made transparent. We positively encourage every participant to feel it is part of their responsibility to contribute to developing the programme and enhancing the student experience by taking part in programme evaluation. We will make every effort to feedback to student representatives and the student body changes that have been initiated as a result of discussions in the SSLC or elsewhere.

Please also see earlier for other information about how you can make observations and suggestions about developing the programme. We welcome these. There is a normal structure for this based around standard evaluation, student representatives, the staff student liaison committee and informal feedback to staff.

Programme Representatives
Every College programme has one or more student representative who can make the views of students heard and act as a conduit between staff and students. On a programme with part-time students, this role is doubly important and difficult. We fully recognise the difficulty of part-time students in keeping in touch and liaising with each other and the programme staff. One of the main functions of the student representative is to come to the SSLC; we welcome alternates, as necessary, to ensure the student voice is heard.

Staff Student Liaison Committee
The SSLC is a normal part of College arrangements for quality assurance of programmes. The committee consists of student and staff representatives and may be chaired by a student member; it is serviced by the programme administrator. The SSLC meets regularly to discuss programme matters, including suggestions for introducing changes both major and minor. Module evaluation outcomes and the biannual report all form part of the agenda. We seek to arrange these meetings at convenient times; they will be held during module teaching blocks whenever possible.

Summary of QA Methods
Mechanisms for review and evaluation of teaching, learning, assessment, the curriculum and outcome standards:

- The Management Board for the programme
- Annual review of modules by team based on feedback questionnaires.
- Biennial Programme Report prepared by programme leader(s) and considered by the Staff-Student Liaison Committee and the relevant department and Graduate Schools Committees
- Staff-Student Liaison Committee consideration of results from feedback questionnaires, the programme report and other matters arising
- Biennial staff appraisal
- Participation of tutors in Imperial’s peer observation arrangements
- External Examiner system and Examination Board
- Compliance with Imperial College London quality assurance requirements

Committees with responsibility for monitoring and evaluating quality and standards
- Programme/module team meetings
- Quality & Sustainability Board
- Staff-Student Liaison Committee
- Management Board
- Board of Examiners
- Departmental (PG) Teaching Committee
- Graduate Schools Postgraduate Quality Committee

Complaints and Appeals
Matters that cannot be resolved within the programme team should normally be taken to the Divisional Director of Postgraduate Studies. If they still cannot be resolved they can be referred upwards.

To see how the development and quality assurance processes dovetail with student support, read the section on Personal/Pastoral and Academic Support.
What you can expect: (g) Imperial College Registry and Students Regulations

The Surgical Innovation programme follows College wide regulations with respect to all academic matters. Where permitted by College, we develop guidance specific to the needs of the course and its students. The course specific guidance is detailed here and throughout this document. College regulations for all students and specifically for Postgraduate Taught Masters can be found by going to the Registry website at: www3.imperial.ac.uk/registry/proceduresandregulations/regulations. They are also included in the Appendices of this document.

The College has key requirements that must be followed with respect to registration, attendance, coursework, assessment, marking, degree classification, etc. Following these requirements affords students a better chance at progression and completion of the course. It likewise allows teaching and administrative resources to be used effectively.

Importantly, students must attend the course and complete its work within specified periods of time and to a specific standard. Where a student cannot meet these stated requirements due to acceptable, verifiable and agreed upon ‘mitigating’ circumstances, that are made in advance, provisions can be made. Every student will be given full consideration on the individual merits of his/her case.

As a guide, the College defines mitigating circumstances as pregnancy/childbirth, serious personal illness, or bereavement of a close family member. In addition, other personal circumstances may be deemed as sufficient by the course organisers but these are limited, not guaranteed, and must be discussed in advance of sessions and well in advance of deadlines.

While we cannot be exhaustive in defining personal circumstances, generally speaking, normal and predictable activities surrounding your work and commensurate with your level of training/seniority are not considered sufficient reason to interrupt studies or seek extensions or deferrals. Interviewing, moving house, studying for exams, being busy at work, as examples, are not normally considered sufficient circumstances. Generally speaking, we do not recommend you undertake additional commitments that require large chunks of your time while you are registered on the course.

In cases where a candidate’s circumstances are deemed sufficient and these would prevent him/her from attending modules or making significant and timely progress on the dissertation, the course organisers will likely recommend the candidate request an Interruption of Studies (IOS) for a specified period of time. Where a candidate with acceptable circumstances does not require additional teaching/supervision and only requires a short period of time to complete work an extension or deferral, as appropriate, can be requested.

An IOS officially stops your study at the College and allows you to recommence at an agreed upon time (usually one year). An IOS will only be given during the academic year, cannot normally exceed a total of two years, and is subject to the programme director and registry approval. Interruptions of studies will not be given once the student has completed the one year (full time students) or two years (part time students) registration. Students who interrupt will also be asked to submit any outstanding assignments prior to re-registry, using the original questions given to their cohort. Students returning from IOS are responsible for registering onto the course by the registration deadline. Students who do not meet the deadline run the risk of College withdrawing them from the course.

Where we do not agree to the circumstances presented, or these are not presented in a timely manner, the candidate who does not attend required modules and/or does not submit required work, will be recommended as a first attempt fail at the relevant Examination Board. The candidate has the right to re-enter the required work on one additional occasion at the subsequent Examination Board. Marks and degree classification can be capped at a ‘pass’ in these circumstances. Make-up
module attendance and re-sitting examinations may entail additional fees. Students also have the
right to appeal Exam Board decisions provided they do so within one month of being notified of their
results.

All official communication from Registry is via your College email address. As stressed earlier in this
document, you are responsible for using your College email for this and other course communication.

Registry manages a wide range of advice and guidance on academic matters, including other
procedures and regulations not discussed above. Their web site can be consulted whenever you
have questions about academic matters. www3.imperial.ac.uk/registry/proceduresandregulations

The following link will direct you to key regulatory information related to Imperial’s Academic and
Examination Regulations for Taught Master’s Degrees. The appendix that follows details guidance
around publishing work related to the course.

http://www.imperial.ac.uk/about/governance/academic-governance/regulations/
Appendix 1: College guidance for students on publication of research

Students will often publish their research in academic journals. The following statement is designed to inform students about their rights and responsibilities in publishing:

Intellectual Property

It is unusual for students to own the IP developed during their research, as it will invariably fall under one of the categories set out below in the College’s IP statement:

Where students generate IP in the course of their study or research they will own that IP in their own right unless one of the following applies:

(i) they hold a sponsored studentship under which the sponsor has a claim on the arising IP; or
(ii) they participate in a research programme wherein the arising IP is committed to the sponsor of the research; or
(iii) they generate IP which builds upon existing IP generated by, or is jointly invented with College Employees or Associates; or
(iv) they are, or have the status of, College Employee (in which case they are treated by College and the law as employees).

In situations (iii) and (iv) above, students will be required to assign that IP to College, and in respect of revenue generated by that IP, the student will be treated on the same basis as College Employees under the Reward to Inventors Scheme.

Publication of Research

To avoid confusion, students should consult their supervisor before submitting any manuscript for publication, even if they believe themselves to own the IP; premature or misleading publication of data could hinder patent applications or damage the College’s reputation.

Authorship Rules

Irrespective of IP ownership, all journal articles must adhere to The Vancouver Protocol, the internationally-recognised standard for determining authorship. It states that in order to be credited as an author, each author must have been involved in all three of the:

1. Conception and design, or analysis and interpretation of data
2. Drafting the article or revising it critically for important intellectual content
3. Final approval of the version to be published.

Where the IP is owned by the College or supervisor, the supervisor must be given the opportunity to contribute under points 2 and 3. Sole authorship by a student will be highly unusual.

Where College rules are broken, the incident will be investigated under research misconduct rules as detailed at http://www.imperial.ac.uk/research-and-innovation/about-imperial-research/research-integrity/misconduct/

By undertaking a research project within the College, you are agreeing to adhere to its publication policy. Where you are in any doubt, speak to your supervisor first. If you cannot resolve matters in this way, please contact your DPS via the Department’s PG Administrator.
Appendix 2: Regulations and Procedures

The College’s Academic and Examination Regulations for Students:

http://www.imperial.ac.uk/about/governance/academic-governance/regulations/

The College’s Terms and Conditions

http://www.imperial.ac.uk/students/terms-and-conditions/

Complaints and Appeals procedures:

http://www.imperial.ac.uk/about/governance/academic-governance/academicpolicy/complaints-appeals-and-discipline/

Academic integrity:


Cheating offences policy and procedures:

http://www.imperial.ac.uk/about/governance/academic-governance/regulations/

Where applicable – Fitness to Practise Medicine and Licence to Practice information:


If applicable, information regarding use of animals in research

http://www.imperial.ac.uk/research-and-innovation/about-imperial-research/researchintegrity/animal-research/

Intellectual Property Policy:

http://www.imperial.ac.uk/research-and-innovation/research-office/ip/
Appendix 3: Wellbeing and Support

Academic/Postgraduate Tutor system, links to relevant Roles and Responsibilities documents:


Information for students with disabilities, including the Disability Advisory Service:
http://www.imperial.ac.uk/disability-advisory-service/
Student Support (Student Space): Wellbeing and pastoral care/support resources both departmental and College-wide including:

College Tutors and departmental support
Director of Student Support
Student Counselling and Mental Health Advice Service
Finding a Doctor
NHS Health Centre
NHS Dentist
Student Hub
Chaplaincy
Hall Warden Teams
Support for International Students
Student Support Fund
Safety Department – Safety Services

http://www.imperial.ac.uk/safety

Centre for Academic English:
http://www.imperial.ac.uk/academic-english

Information about the Library:
http://www.imperial.ac.uk/admin-services/library/

Imperial College Union (ICU):
http://www.imperialcollegeunion.org/

Graduate Students' Union (GSU)
https://union.ic.ac.uk/presidents/gsu/

[Welcomes from the ICU and GSU presidents [when available] can be found at:
http://www.imperial.ac.uk/staff/tools-and-reference/quality-assurance-enhancement/programme-information/programme-handbooks/]

ICU Advice Centre: https://www.imperialcollegeunion.org/advice

Student representation – how to become a student representative:
https://www.imperialcollegeunion.org/your-union/your-representatives/academicrepresentatives/overview

Details of departmental/College Committees, including Staff-Student Committees. (The College's Staff-Student Committee Good Practice Guidelines are available at:
http://www.imperial.ac.uk/about/governance/academic-governance/academicpolicy/student-feedback/)
Other useful information and support services:

Registry: http://www.imperial.ac.uk/admin-services/registry/
Careers Service: http://www.imperial.ac.uk/careers
Accommodation: http://www.imperial.ac.uk/study/campus-life/accommodation/
Student Finance: http://www.imperial.ac.uk/fees-and-funding/
ICT Service: http://www.imperial.ac.uk/students/online-services/
Sport Imperial: http://www.imperial.ac.uk/sport/
Student online services: http://www.imperial.ac.uk/student-records-and-data/forcurrent-students/
Alumni Services: http://www.imperial.ac.uk/alumni/

Opportunities for further study - If applicable, details of the PG Open Day
http://www.imperial.ac.uk/study/pg/open-days-and-visits/postgraduate-open-day/