

PG Cert, PG Dip & MSc Surgical Innovation

This document provides a definitive record of the main features of the programme and the learning outcomes that a typical student may reasonably be expected to achieve and demonstrate if s/he takes full advantage of the learning opportunities provided. This programme specification is intended as a reference point for prospective students, current students, external examiners and academic and support staff involved in delivering the programme and enabling student development and achievement.

Programme Information

Programme Title		Surgical Innovation	
Award(s)		PG Cert	PG Dip MSc
Programme code(s)		A3EVC	A3EVD (Jun) A3EVM A3EV24 (Nov)
Awarding Institution		Imperial College London	
Teaching Institution		Imperial College London	
Faculty		Faculty of Medicine	
Department		Department of Surgery and Cancer	
Main Location of Study		St Mary's Campus	
Mode and Period of Study		PG Cert	9 months, part-time
		PG Dip	16 months, part-time (including 8 months on the PG Cert)
		MSc	2 calendar years (24 months), part-time (including 16 months on the PG Dip)
Cohort Entry Points		<p>Candidates must register onto the PG Cert in the first instance and progress through the awards in turn. Cohort entry points for each award are as follows:</p> <ul style="list-style-type: none"> • Annually in September for the PG Cert • Annually in June for students who have already completed the PG Cert • Annually in November for students who have already completed the PG Dip <p>See progression rules below for more information.</p>	
Relevant QAA Benchmark Statement(s) and/or other external reference points		<p>The programme is consistent with the overarching qualifications of the European Higher Education Framework</p> <p>http://www.ehea.info/Uploads/qualification/QF-</p>	

		EHEA-May2005.pdf			
Total Credits	PG Cert	ECTS:	30	CATS:	60
	PG Dip	ECTS:	60	CATS:	120
	MSc	ECTS:	90	CATS:	180
FHEQ Level		Level 7			
EHEA Level		2 nd cycle			
Specification Details					
Student cohorts covered by specification		2020-21			
Person responsible for the specification		Professor George Hanna, Head of Division of Surgery, Programme Director			
Date of introduction of programme		October 2015			
Date of programme specification/revision		November 2019			
Programme Overview					
<p>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</p> <p>In line with the College Mission Statement, the new programme will 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, as well as concepts and techniques in surgical research.</p> <p>The Postgraduate Certificate comprises four taught modules (each with one taught week) over 9 months.</p> <p>The Postgraduate Diploma comprises six taught modules (each with one taught week) and a Library dissertation over 16 months.</p> <p>The MSc programme comprises seven taught modules (each with one taught week, over two years), a library dissertation and a research project.</p>					

Learning Outcomes

The Imperial Graduate Attributes are a set of core competencies which we expect students to achieve through completion of any Imperial College degree programme. The Graduate Attributes are available at: www.imperial.ac.uk/students/academic-support/graduate-attributes

Students who have successfully completed the programme should be able to:

Certificate

- Enhance knowledge of the scientific basis of surgery
- Define and debate the principles of modern surgical practice
- Analyse modern literature in order to develop evidence based practice
- Acquire a critical understanding of the issues involved in the application of technology to surgery
- Evaluate the need for a patient safety or quality improvement intervention
- Consider how to design complex quality improvement interventions and evaluate the challenges and barriers
- Begin to understand some of the nature and use in practice, of education theory and educational research and how this is similar or different from other disciplines
- Judge the strengths and weaknesses of undergraduate and postgraduate medical/surgical education from an educational perspective
- Describe the principles and workings of current interventional technology and imaging routinely used in surgery and interventional medicine
- Enhance the understanding of new challenges faced by the surgeon with a view to developing practical problem-solving skills
- Develop multidisciplinary training and encourage collaborative work with other clinical and non-clinical disciplines

Diploma

- Develop the academic basis for specialised surgical practice in the fields of bariatric medicine and surgery, colorectal surgery, oesophagogastric surgery, orthopaedic surgery, vascular surgery or trauma surgery
- Show an awareness of the challenges and trends in bariatric medicine and surgery, colorectal surgery, oesophagogastric surgery, orthopaedic surgery or vascular surgery
- Demonstrate ability to critically appraise and reflect on clinical, technological and socio-economical factors affecting surgical practice
- Illustrate literature searching skills
- Practice academic writing skills

MSc

- Develop experience in the methodology and principles of conducting research with application to clinical medicine and surgery
- Be able to exercise choice in a range of qualitative and quantitative research methodologies to suit research questions
- Help acquire analytical and assessment skills to apply quality assurance standards to clinical surgery
- Be better informed of the current trends in surgical research
- Create and successfully pursue an original research plan utilising research methodologies fit for purpose, underpinned by relevant theories/evidence and good practice

<ul style="list-style-type: none"> Develop a solid foundation and training in research skills for those who intend to go on to study for an MD or PhD 	
Entry Requirements	
Academic Requirement	<p>A degree in medicine or at least an Upper 2:1 UK Bachelor's Degree with Honours in a health-related science (or a comparable qualification recognised by the College).</p> <p>Applicants should also have at least one year's clinical experience, preferably with some surgical training, or at least one year's experience in a relevant area related to surgery.</p>
Non-academic Requirements	<p>Potential students must submit a letter of confirmation that their employing Trust is willing to provide them with the time off to attend the mandatory teaching sessions at Imperial.</p>
Home/EU/international applicants may be invited to attend an interview.	
English Requirement	<p>Standard requirement</p> <p>IELTS 6.5 with a minimum of 6.0 in each element or equivalent.</p>
<p>The programme's competency standards documents can be found at: http://www.imperial.ac.uk/students/academic-support/graduate-attributes/</p>	
Learning & Teaching Strategy	
Scheduled Learning & Teaching Methods	<ul style="list-style-type: none"> Interactive lectures Face-to-face teaching Case based discussions Panels Expert debates Practical sessions
E-learning & Blended Learning Methods	<ul style="list-style-type: none"> Pre-module activities Group discussion boards
Project and Placement Learning Methods	<ul style="list-style-type: none"> Independent research project (MSc students only)
Assessment Strategy	
Assessment Methods	<ul style="list-style-type: none"> e-learning MCQs/MEQs Preparation of teaching video Structured debates Group presentations

	<ul style="list-style-type: none"> • Academic oral presentations • Written / practical exams. • Critical reflection • Literature review • Evidence-based mini project • Topical essay • e-teaching case
<p>Academic Feedback Policy</p>	
<p>Coursework feedback is provided by a feedback form attached to items of coursework. Feedback is also provided via Blackboard on automatically-assessed pieces of coursework and on formative MCQ quizzes. Personal tutors hold timetabled tutorials at the start of the academic year to give feedback on examination performance and can be approached by their tutees at any point in the year for further guidance. The Academic Co-director and Programme Administrator inform individual staff via email when coursework is due back at the appropriate time. The Academic and Clinical Co-directors routinely monitor the quality and quantity of feedback provided on marked coursework. In some instances, generic class feedback may be returned to all students via email or a Blackboard announcement once coursework is marked.</p>	
<p>Re-sit Policy</p>	
<p>All Taught Master’s Degrees, Postgraduate Diplomas and Postgraduate Certificates: In line with College policy, students who are unsuccessful in any of their examinations may usually be allowed an opportunity to re-sit at the discretion of the Board of Examiners. Specific information regarding re-sits for Taught Master’s degrees can be found in the relevant Academic Regulations available at: https://www.imperial.ac.uk/about/governance/academic-governance/regulations/</p>	
<p>Mitigating Circumstances Policy</p>	
<p>Students may be eligible to apply for mitigation if they have suffered from serious and unforeseen circumstances during the course of their studies that have adversely affected their ability to complete an assessment task and/or their performance in a piece of assessment. The College’s Policy on Mitigating Circumstances is available at: https://www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/</p>	
<p>Assessment Structure</p>	
<p>Progression Rules</p>	
<p>Students will register for the Postgraduate Certificate in the first instance. If they successfully pass the Certificate they will choose to progress to either the Diploma or the MSc. Students who choose the Diploma option can still progress to the MSc after completion of the Diploma but it will take them an additional year.</p> <p>Students can return in later years to complete either the PG Diploma or MSc as long as the PG Diploma is completed within 4 years of registering for the PG Certificate and the MSc is completed within 5 years of registering for the Postgraduate Certificate. The annual entry point for students</p>	

who already hold a Postgraduate Certificate for the Diploma (and/or Masters) is June. The entry point for students who already hold the PG Diploma is November.

Marking Scheme

Postgraduate Certificate

A student must:

- Achieve a mark of at least 40% in each assessment
- Achieve a pass mark of 50% or greater in each module
 - Students may be condoned in one module with an aggregate mark of 45% where the aggregate mark for the Postgraduate Certificate is 50% or greater.

Postgraduate Diploma

A student must:

- Meet the requirements for the postgraduate certificate (above)
- Achieve a mark of at least 40% in each assessment
- Achieve a pass mark of 50% or greater in each module
 - Students may be condoned in one module with an aggregate mark of 45% where the aggregate mark for the Postgraduate Diploma element is 50% or greater

MSc

A student must:

- Meet the requirements for the Postgraduate Certificate and Postgraduate Diploma (above)
- Achieve a mark of at least 50% in the Research Project

Final Degree Classifications

The PG Certificate and PG Diploma are not classified. The MSc can be awarded as a pass, merit or distinction classification.

In order to be awarded a result of **merit**, a candidate must achieve at least 60 per cent in each component; in order to be awarded a result of **distinction**, a candidate must achieve at least 70 per cent in each component.

- Where appropriate, a Board of Examiners may award a result of **merit** where a candidate has achieved an aggregate mark of 60 per cent or greater across the programme as a whole AND has obtained a mark of 60 per cent or greater in each element with the exception of one element (but not the project element) AND has obtained a mark of 50 per cent or greater in this latter element.
- Where appropriate, a Board of Examiners may award a result of **distinction** where a candidate has achieved an aggregate mark of 70 per cent or greater across the programme as a whole AND has obtained a mark of 70 per cent or greater in each component with the exception of one component (but not the project component) AND has obtained a mark of 60 per cent or greater in this latter component.

Module Weightings				
Element	Module	% Module Weighting (PG Cert)	% Module Weighting (PG Dip)	% Module Weighting (MSc)
PG Cert	Principles of Surgery	25%	12.5%	8.3%
	Surgical Education	25%	12.5%	8.3%
	Improving Safety, Implementing Change	25%	12.5%	8.3%
	Interventional Technology and Imaging	25%	12.5%	8.3%
PG Dip	2 x modules from elective group (A-H)*	N/A	12.5% each	8.3% each
	Library Dissertation		25%	16.5%
MSc	Research Methods		N/A	N/A
	Research Project	25.8%		

*Modules within each elective group must be taken together as a single stream.

Indicative Module List											
Code	Title	Core/ Elective	L&T Hours	Ind. Study Hours	Place- ment Hours	Total Hours	% Written Exam	% Course- work	% Practical	FHEQ Level	ECTS
SURG97036	Principles of Surgery	CORE	28	159.5	0	187.5	20%	80%	0%	7	7.5
SURG97037	Surgical Education	CORE	29	158.5	0	187.5	0%	100%	0%	7	7.5
SURG97038	Improving Safety, Implementing Change	CORE	29	158.5	0	187.5	0%	100%	0%	7	7.5
SURG97039	Interventional Technology and Imaging	CORE	32	155.5	0	187.5	30%	70%	0%	7	7.5
SURG97040	Bariatrics 1 – Obesity Medicine	ELECTIVE (A)	27	160.5	0	187.5	0%	80%	20%	7	7.5
SURG97041	Bariatrics 2 – Bariatrics Surgery	ELECTIVE (A)	27	160.5	0	187.5	0%	100%	0%	7	7.5
SURG97042	Colorectal Surgery 1 – Emergency Survey and Colorectal Cancer	ELECTIVE (B)	21.25	166.5	0	187.5	30%	70%	0%	7	7.5
SURG97043	Colorectal Surgery 2 – Inflammatory Bowel Disease, Perianal Disease and Functional Bowel Disorders	ELECTIVE (B)	22.5	165	0	187.5	0%	80%	20%	7	7.5
SURG97044	Orthopaedic Surgery 1 – Elective Practice	ELECTIVE (C)	30.25	157.25	0	187.5	0%	70%	30%	7	7.5
SURG97045	Orthopaedic Surgery 2 – Trauma and Fracture Care	ELECTIVE (C)	30	157.5	0	187.5	0%	70%	30%	7	7.5
SURG97046	Oesophago-Gastric Surgery 1 – Oesophago-Gastric Cancer	ELECTIVE (D)	30.25	157.25	0	187.5	0%	70%	30%	7	7.5
SURG97047	Oesophago-Gastric Surgery 2 – Benign Conditions of the Oesophagus and Stomach and OG Emergencies	ELECTIVE (D)	28.5	159	0	187.5	0%	70%	30%	7	7.5

Indicative Module List											
Code	Title	Core/ Elective	L&T Hours	Ind. Study Hours	Place- ment Hours	Total Hours	% Written Exam	% Course- work	% Practical	FHEQ Level	ECTS
SURG97048	Vascular Surgery 1 – General and Aortic Surgery	ELECTIVE (E)	23.75	163.75	0	187.5	20%	80%	0%	7	7.5
SURG97049	Vascular Surgery 2 – Peripheral and Venous Surgery	ELECTIVE (E)	22	165.5	0	187.5	20%	80%	0%	7	7.5
SURG97050	Trauma Surgery 1 - Casualty Reception and Initial Management	ELECTIVE (F)	30	157.5	0	187.5	0%	70%	30%	7	7.5
SURG97051	Trauma Surgery 2 - Operative Management of Injuries	ELECTIVE (F)	30	157.5	0	187.5	0%	70%	30%	7	7.5
SURG97055	Transplant 1 - Principles of Transplantation Surgery	ELECTIVE (G)	30	157.5	0	187.5	0%	70%	30%	7	7.5
SURG97056	Transplant 2 - Transplant Surgery Techniques and Complications	ELECTIVE (G)	30	157.5	0	187.5	0%	70%	30%	7	7.5
SURG97079	ENT 1 - Basic Science, Education, Training, Outcomes & Technology I	ELECTIVE (H)	30	157.5	0	187.5	0%	70%	30%	7	7.5
SURG97080	ENT 2 - Technology II and Clinical Innovation	ELECTIVE (H)	30	157.5	0	187.5	30%	70%	0%	7	7.5
SURG97052	Library Dissertation	CORE	0	375	0	375	0%	100%	0%	7	15
SURG97053	Research Methods	CORE	22.5	165	0	157.5	0%	70%	30%	7	7.5
SURG97054	Research Project	CORE	0	565	0	565	0%	100%	0%	7	22.5

Supporting Information

The Programme Handbook is available at:

<https://www.imperial.ac.uk/medicine/study/postgraduate/masters-programmes/msc-pg-dip-and-pg-cert-surgical-innovation/>

The Module Handbook is available at:

<https://www.imperial.ac.uk/medicine/study/postgraduate/masters-programmes/msc-pg-dip-and-pg-cert-surgical-innovation/>

The College's entry requirements for postgraduate programmes can be found at:

www.imperial.ac.uk/study/pg/apply/requirements

The College's Quality & Enhancement Framework is available at:

www.imperial.ac.uk/registry/proceduresandregulations/qualityassurance

The College's Academic and Examination Regulations can be found at:

<https://www.imperial.ac.uk/about/governance/academic-governance/regulations>

Imperial College is an independent corporation whose legal status derives from a Royal Charter granted under Letters Patent in 1907. In 2007 a Supplemental Charter and Statutes was granted by HM Queen Elizabeth II. This Supplemental Charter, which came into force on the date of the College's Centenary, 8th July 2007, established the College as a University with the name and style of "The Imperial College of Science, Technology and Medicine".

<http://www.imperial.ac.uk/admin-services/secretariat/college-governance/charters/>

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<https://www.officeforstudents.org.uk/>

Modifications

Description	Committee	Date	Paper
Correct the entry point from October to September as approved at programmes committee in June 2016	Programmes Committee	30 June 2016	PC.2015.62
Correct the period of study for the PG Cert from 8 to 9 (as a result of above)	Programmes Committee	30 June 2016	PC.2015.62
Clarify the entry points and additional information under the programme codes section	N/A	03 February 2017	N/A
Clarification of cohort entry points	N/A	03 February 2017	N/A
Clarification of the elements in the module weightings table	N/A	03 February 2017	N/A
Addition of progression rules section	N/A	03 February 2017	N/A
Addition of the Transplant stream	Programmes Committee	09 May 2017	PC.2016.12 5

Addition of the ENT stream	Programmes Committee	05 September 2017	PC.2017.15 8
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