Glasgow School of Art Programme Specification
Programme Title: BEng/MEng Product Design Engineering

Please note that this programme specification is correct on the date of publication but may be subject to amendment prior to the start of the 2025-26 Academic Year.

1. Programme Details:

Programme Title	BEng/MEng Product Design Engineering
HECOS Code	
School	School of Design
Programme Leader	Craig Whittet
Minimum Duration of Study	BEng 48 months MEng 60 months
Maximum Duration of Study	
Mode of Study	Full-time
Award to be Conferred	Bachelor of Engineering in Product Design Engineering Master of Engineering in Product Design Engineering
Exit Awards	Stage 1 CertHE (Engineering Studies) Stage 2 DipHE (Engineering Studies) Stage 3 BSc (Ord) Stage 4 BEng / BSc (Hons) Stage 5 MEng
SCQF Level:	10/11
Credits:	480/600

Academic Session	2025-26
Date of Approval	PACAAG August 2023

2. Awarding Institution	University of Glasgow
3. Teaching Institutions	The Glasgow School of Art and University of Glasgow
3.1 Campus	Glasgow
4. Lead School/Board of Studies	School of Design
5. Other Schools/Board of Studies	N/A
6. Programme Accredited By (PSRBs)	Institution of Mechanical Engineers (IMechE) Institution of Engineering Designers (IED)

7. Entry Qualifications	
7.1 Highers	**BEng (4 year course)** ▪ AABB is the minimum requirement from S5 to be reviewed for an S6 offer ▪ Offers are not guaranteed to applicants who meet the minimum from S5 ▪ Typically offers will be made at AAAAA by end of S6. B at Advanced Higher is equivalent to A at Higher

	▪ Additional requirements: Higher Mathematics and Physics or Engineering Science at AA. (AB or BA may be considered) **MEng (5 year course)** • AAAB is the minimum requirement from S5 to be reviewed for an S6 offer • Offers are not guaranteed to applicants who meet the minimum from S5 • Typically offers will be made at AAAAAA by end of S6. B at Advanced Higher is equivalent to A at Higher • Additional requirements: Higher Mathematics and Physics or Engineering Science at AA. **SQA Higher Adjusted Entry Requirements* (by end of S5 or S6)** ▪ **BEng: MD20**: BBBB (also other target groups*) ▪ **BEng: MD40**: AABB* ▪ Additional requirements: Higher Mathematics and Physics or Engineering Science. Successful completion of Top-Up or one of our Summer Schools.
7.2 A Levels	▪ **BEng:** AAB – BBB ▪ **MEng**: AAA ▪ Additional requirements: A-level Mathematics and Physics (Design & Technology may be accepted in place of Physics, 3D or Product Design options only).
7.3 Other	• Advanced entry It is possible for applicants with exceptional A-level or Advanced Higher grades to enter directly into Year 2 or follow a faster route advanced entry programme, both of which allow students to complete the degree in one year less than usual. Depending on applicant's prior experience a design engineering assignment may be set. **IB Standard Entry Requirements** ▪ **BEng**: 36 (6,6,5 HL) – 32 (6,5,5 HL) ▪ **MEng**: 38 (6,6,6 HL) ▪ Additional requirements: HL Mathematics (Analysis & Approaches) and Physics. (SL6 can be accepted for either Mathematics or Physics). Please note: all A-Level, International Baccalaureate, and other EU entry requirements must be achieved in first sitting.
7.4 English Language Requirements	All students will have to provide evidence of English language proficiency when applying. International Students

	Students who require a Tier 4 visa to study in the UK must meet one of the following requirements in order to gain entry: • IELTS for UKVI Academic with an overall score of 6.5 with a minimum of 6.0 in all components; • complete an acceptable Pre-sessional English Language Programme taught from within the UK with an outcome that equates to the IELTS scores as stated above. Students who have a degree from an English speaking country, or are a national of an English speaking country as listed in the UKVI Guidance, may use this as proof of English language ability.

8. Programme Scope:

The PDE programme's rationale is to meet a growing industry demand for confident design engineering graduates, able to deliver and demonstrate a comprehensive blend of sound theoretical technical understanding coupled with creative practical application in the development of products to meet human needs.

The integration of two distinctive educational cultures is the essence of PDE. This experience and mix of design studio work with engineering theory and labs provides an introduction to the requirements of working in industry.

The practical application of these skills is primarily through studio engagement, and students will develop skills in PRODUCT – What the Product you're designing on has to do and have. PROCESS – How you carry out the activity of designing products and PRESENTATION – Externalising and Representing your ideas.

Embedded in these will be an ever increasing application of Quality, Responsibility, Resolution and Relevance as students progress through the programme.

The PDE studio programme at the Glasgow School of Art is centred around design project activities. The overall approach of the PDE studio is 'Core-Explore'.

The early years (Core) are designed to build familiarity and skill with a variety of tools, increasing confidence in the design process, and to develop creativity and the exploration and expression of ideas.

The later years (Explore) of the degree focus on the acquisition of in-depth technical skills, and their application to substantial design engineering projects. The study of contextual issues within the studio programme relates work to entrepreneurial, economic, business, and social considerations.

9. Programme Structure:

Year 1	**Credits**	**SCQF Level**
(UoG EXT1019) Product Design Engineering 1	20	7
(UoG ENG1063) Engineering Mathematics 1	40	7
(UoG ENG1026) Engineering Skills 1	10	7
(UoG ENG1003) Analogue Electronics 1	10	7

(UoG ENG1062) Dynamics 1	10	7
(UoG ENG1033) Materials 1	10	7
(UoG ENG1065) Statics 1	10	7
(UoG ENG1066) Thermodynamics 1	10	7
Total	**120**	
Year 2		
(UoG EXT2076) Product Design Engineering 2	30	8
(UoG ENG2086) Engineering Mathematics 2	20	8
(UoG ENG2085) Fluid Mechanics 2	10	8
(UoG ENG2081) Mechanics of Structures 2A	10	8
(UoG ENG2077) Engineering Skills 2	10	8
(UoG ENG2084) Dynamics 2	10	8
(UoG ENG2045) Power Electronics 2	10	8
(UoG ENG2015) Design and Manufacture 2	10	8
(UoG ENG2053) Thermodynamics 2	10	8
Total	**120**	
Year 2 Advanced Entry		
(UoG EXT2076) Product Design Engineering 2	30	8
(UoG ENG2086) Engineering Mathematics 2	20	8
(UoG ENG2085) Fluid Mechanics 2	10	8
(UoG ENG2081) Mechanics of Structures 2A	10	8
(UoG ENG2077) Engineering Skills 2	10	8
(UoG ENG2084) Dynamics 2	10	8
(UoG ENG2045) Power Electronics 2	10	8
(UoG ENG2015) Design and Manufacture 2	10	8
(UoG ENG2053) Thermodynamics 2	10	8
Total	**120**	
MEng Advanced Entry Route 2, 3,4 Following the curriculum of the MEng in Product Design Engineering Year 3, 4 and 5 BEng in PDE and BSc Hons in PDE Years 1, 2 and 3 follow the curriculum of the MEng in Product Design Engineering Year 3, 4 and 5		
Year 3		
(UoG EXT3013) Product Design Engineering 3	40	**9**
(UoG ENG3039) Dynamics 3	10	9
(UoG ENG3015) Control 3	10	
(UoG ENG3032) Heat Transfer 3	10	9
(UoG ENG3037) Mechanics of Solids 3	10	9
(UoG ENG3036) Mathematical Modelling and Simulation M3	10	9
(UoG ENG3035) Materials and Manufacturing M3	10	9
(UoG ENG3092) Mechanical Engineering Skills 3	10	9
Optional Courses – students choose 1 from the following list:		
(UofGENG3030) Fluid Mechanics 3	10	
(OofG ENG3091) Advanced Programming and Software Engineering 3	10	
Total	**120**	
Year 4 BEng		

(UoG ENG4004) Materials Engineering 4	10	10
(UoG ENG4098) Microelectronics in Consumer Products 4	10	10
(UoG ENG4094) Mechanics of Solids 4	20	10
(UoG EXT4092) Design for Manufacture	20	10
(UoG EXT4090P) Product Design Engineering 4B	60	10
Total	**120**	
Year 4 MEng		
(UoG ENG4004) Materials Engineering 4	10	10
(UoG ENG4098) Microelectronics in Consumer Products 4	10	10
(UoG ENG4094) Mechanics of Solids 4	20	10
(UoG EXT4005) Design and Technology Studies P4	10	10
(UoG ENG4085) Integrated System Design Project 4	20	10
(UoG EXT4091 P) Product Design Engineering 4M	50	10
Total	**120**	
Year 5 MEng		
(UoG ENG5276) Advanced Manufacture 5	20	11
(UoG EXT5154) Human Factors M5	10	11
(UoG ENG5302) Ultrasound Technology and Application or (UoG ENG5227) Structures under Extreme Loads M	10	11
(UoG XT5155P) Product Design Engineering 5M	60	11
(UoG ENG4118) Robotics 4	20	10
Total	**120**	

9.1 Programme Structure – Exchange In/Exchange Out/Study Abroad:
N/A

10. What are the requirements for progressing from each stage/year?
Students who successfully complete and pass all credits from the previous stage of study will be allowed to progress to the next stage.

11. Programme Aims:
The GSA PDE studio programme aims to: • provide a sound education and broad basis for a career in design engineering, product development, the creative management of the development and manufacturing processes, and other related disciplines • develop your awareness of the relationship between products and human users, and the ways in which product solutions can address human-centred opportunities and problems • develop your knowledge base in and understanding of technologies, materials and • manufacturing methods • develop your confidence and competence in research and investigation, creative synthesis, evaluative judgement, visualisation, and the application of a wide range of other problem-solving methods to support the design engineering process • develop critical, analytical, problem-based learning skills • develop your professionalism and general transferable skills, including communication and

- interpersonal skills, to prepare you for graduate employment
- through contact with industry, provide you with an understanding of the requirements, terminology and standards of the profession you are entering
- provide a curriculum which is accredited by the Institution of Mechanical Engineers (to
- Chartered status for MEng stage only)
- provide you with opportunities to develop skills required for both autonomous practice and team-working

Each year /stage of the course occupies one academic year.

Students are involved in a wide range of design activities including awareness of market, technologies, materials and manufacturing, human factors and aesthetics. Skills in communication, drawing and visualisation, model-making and prototyping, IT/CAD/CAM and project management are also developed.

Students are exposed to industry throughout the programme by means of visits, lectures, seminars and workshops, and the final years involve an individual major project often organised in close collaboration with industry or other external party/collaborator.

Throughout the programme, the studio at GSA is an environment in which the engineering sciences from the lectures and labs at GU are increasingly applied and integrated, together with the practical and imaginative application of manufacturing, marketing and business issues.

At the end of Year 3, if you meet the appropriate progression requirements, you can choose between the BEng pathway (Year 4), or the MEng pathway (Years 4 and 5).

11.1 Year 1 Aims:

Stage 1 (CertHE/PGCert): Product Design Engineering 1 (PDE1)

By the end of Year 1, you will be expected to have a developed awareness of, and confidence in the learning outcomes of an introductory programme of studio activity.

11.2 Year 2 Aims:

Stage 2 (DipHE/PgDip): Product Design Engineering 2 (PDE2)

By the end of Year 2, you will be expected to have developed the knowledge and skill base acquired at the previous year, and to have become conversant in the learning outcomes of an intermediate programme of studio activity.

11.3 Year 3 Aims:

Stage 3 (BSc/Ordinary): Product Design Engineering 3 (PDE3)

By the end of Year 3, you will be expected to have developed the knowledge and skill base acquired at the previous years, and to have become proficient in the learning outcomes of an intermediate programme of studio activity with increased responsibility for your own learning.

11.4 Year 4 Aims:

Stage 4 (BEng / BSc Hons): Product Design Engineering 4B (BEng) or 4M (MEng) (PDE4B or PDE4M)

By the end of Year 4, you will be expected to have developed the knowledge and skill base acquired at the previous years, sufficient to have undertaken negotiated self-directed studio activity of study to a professional level, potentially involving a degree of external collaboration.

11.5 Year 5 Aims:

Stage 5 (MEng Hons): Product Design Engineering 5M (MEng) (PDE5M)

By the end of Year 5, you will be expected to have developed the knowledge and skill base acquired at the previous years, sufficient to have undertaken a negotiated self-directed enhanced programme of studio activity to an enhanced professional level potentially involving a high degree of external collaboration.

12. Intended Learning Outcomes of Programme:

Each year of the PDE studio programme, or phase or project within a year, will have Intended Learning Outcomes. At the completion of any particular phase or year of study, therefore, it is important that students can demonstrate that they have acquired the Learning Outcomes. At each level of the programme, studio staff will make clear which Learning Outcomes apply.

The Learning Outcomes are the main focus of the studio experience. Further to these Learning Outcomes, staff will introduce: Responsibility, Resolution and Relevance. Embedded in all of these will be the drive to increase quality in all aspects of learning, experience and projects in Product Design Engineering.

The list below is generic in that it applies, to a greater or lesser extent, to all years of the PDE programme. However, in the earlier years of the programme, students will clearly will not be expected to acquire as many Learning Outcomes, or to such depth, as at later years.

PRODUCT – What the Product you're designing on has to do and have.
At the end of this programme you should be able to demonstrate your application of and gain an increasing knowledge & understanding of:

Human Interaction:
Meeting the user's functional, aesthetic and emotional needs.
Including but not limited to: User Cycle, Experience and Feedback, Aesthetics, Semantics, Symbology, Form and Colour

Materials and Manufacturing:
Appropriate selection and specification

Technologies and Components:
Choosing and Selecting Appropriate Technologies and Components and incorporating their function within the product

PROCESS – How you carry out the activity of designing products.
As you progress through the programme, you should gain an increasing ability to apply your knowledge of Product in practical problem-solving situations, eventually in situations similar to those found in a professional working environment. Many of these skills are more 'hands-on' and specific to (but not limited to) the Product Design Engineering programme. At the end of this programme you should be able to demonstrate your application of:

Use of Applicable Engineering Theory:
Incorporating theoretical (e.g courses taught at the University of Glasgow) understanding into design engineering work

Economic & Commercial Issues:
Product Costs vs Volumes vs Manufacturing Methods

Environmental, & Societal Issues:
Ecological and sustainability & issues from Politics and Society that affect the development of products.

Professional and Ethical Responsibilities:
Evidence of appropriate engagement with users and external contacts demonstrating correct moral conduct

Contemporary, Contextual Historical Design issues:
Past, present & future products, technologies and market influences that can inspire and influence your design

Creativity:
How creative your ideas are and how you use techniques to help

Design Process and Investigation:
Developing your design, concept generation & evaluation, iteration, detail development embedded in Design including:

Analysing:
Breaking down a variety of information, issues, structures & objects, from simple to complex, in order to understand the purpose, significance, characteristics and inter-relationship of their component parts.

Synthesising:
Creatively combining knowledge, ideas and physical objects to generate new knowledge, ideas or objects which fulfil a defined purpose

Evaluating:
Weighing-up knowledge, ideas and objects, against appropriate criteria, in order to decide their usefulness and relevance to the task in hand.

Learning skills:
Response to staff input & feedback, learning from studio experiences; responding to staff advice.

Commitment and Energy:
Engagement with studio activity; attendance & personal timekeeping

Project and Time Management:
Managing & scheduling project activity

Research Activity:
Appropriate information gathering; analysis; extracting key issues & product requirements

PRESENTATION – Externalising and Representing your ideas.
A range of skills are important in many aspects of life, and across a variety of personal and professional situations. At the end of this programme you should be able to demonstrate your application of knowledge & understanding of:

Project Documentation:
Externalising, recording & developing ideas; Design Journal, Logbook, research findings

Presentation & Communication of Ideas:
Visual & verbal communication of ideas to others; presentation sheets & drawings
Contributory Skills

Freehand Drawing:
freehand sketching & drawing

Formal Drawing:
orthographic & 'technical' drawing, normally to scale, including isometric/perspective, by hand or computer

Physical Modelmaking:
appropriate use of physical modelmaking to assist design process

3D Digital Modelling (CAD):
e.g. Rhino, Solidworks

2D Digital Image Manipulation:
e.g. PhotoShop & similar programmes; scanning images

General IT Skills:
'office' applications such as word processing, spreadsheet, internet usage, network usage

12.1 Intended Learning Outcomes of Year 1

In addition to the 3P's, students will be reviewed or assessed on the work, as presented in their project documentation, that evidences level of engagement with and the quality of achievement of the intended learning outcomes for PDE1 listed here.

- Demonstrate ability to take a problem or challenge and develop a solution that meets this problem or challenge.
- Demonstrate ability to use freehand drawing, desktop modelling, and workshop skills as part of an effective and creative design process.
- Demonstrate ability to combine images and text on paper as an integral part of your design process and as a way of presenting your work to others.
- Have an elementary awareness of the properties of different materials and components and their appropriate and efficient use.
- Demonstrate ability to manage your time, when working individually and in teams, in order to produce a given result in a specified time
- Demonstrate ability to properly use some assistive techniques for creativity, concept generation, evaluation and selection
- Demonstrate an awareness of the possibilities offered by embedded computing in products, and will have had experience in using the fundamental concepts of computer programming

- Apply the design process to a range of set design problems addressing user needs and technical requirements.

12.2 Intended Learning Outcomes of Year 2

In addition to the 3P's, students will be reviewed or assessed on the work, as presented in their project documentation, that evidences level of engagement with and the quality of achievement of the intended learning outcomes for PDE2 listed here.

- Apply the design engineering process to a range of set design problems addressing user needs and technical requirements.
- Design products that support a user experience within a specified context.
- Apply a range of engineering knowledge and technical skills to resolve a design problem in a real situation.
- Work effectively in a team as well as individually; exercising initiative and taking account of own as well as others' roles and responsibilities.
- Present and communicate your design project clearly and concisely through the appropriate use of text, visualisations and illustrations, models and prototypes.

12.3 Intended Learning Outcomes of Year 3

In addition to the 3P's, students will be reviewed or assessed on the work, as presented in their project documentation, that evidences level of engagement with and the quality of achievement of the intended learning outcomes for PDE3 listed here.

- Apply the design process to a range of design problems addressing user needs and technical requirements.
- Design products that support a user experience within a social context.
- Apply a range of engineering knowledge and technical skills to resolve a design problem in a real situation.
- Work effectively in a team as well as individually; exercising initiative and taking account of own as well as others' roles and responsibilities.
- Present and communicate the design project clearly and concisely through the appropriate use of text, visualisations and illustrations, models, prototypes and engineering drawings.

12.4 Intended Learning Outcomes of Year 4

In addition to the 3P's, students will be reviewed or assessed on the work, as presented in their project documentation, that evidences level of engagement with and the quality of achievement of the intended learning outcomes for PDE4 listed here.

- Apply the design process to a range of design problems addressing user needs and technical requirements.
- Design products that support a user experience within a social context.
- Apply a range of engineering knowledge and technical skills to resolve a design problem in a real situation.
- Work effectively in a team as well as individually; exercising initiative and taking account of own as well as others' roles and responsibilities.
- Present and communicate design project clearly and concisely through the appropriate use of text, visualisations and illustrations, models, prototypes and engineering drawings.
- Demonstrate an appropriate/specific manufacturing processes, and present them fully detailed.
- Demonstrate how CAD/simulation tools can be applied to design concepts in order to refine, simulate and prepare data for manufacture.
- Demonstrate an understanding of the costs involved in manufacturing.

- Demonstrate an ability to develop questionnaires; interview and reporting skills and understand how engineers operate in industry.
- Demonstrate technical and environmental factors that influence the ability to innovate.
- Identifying and addressing relevant aspects of sustainability and environmental impact.
- To work collectively in a group and develop: present a project brief based on interviewing a client.
- Demonstrate understanding of the processes of successful implementation of innovative projects
- Demonstrate understanding of the management of risk.
- Demonstrate of skills and capability in: Critically engaging with and evaluating texts and journal articles and extrapolate from existing data and information, likely future trends of concern to product design engineers.
- Understanding the development of design ideologies and their influence
- Understanding the main influences on product development strategies
- Understanding the social, economic and environmental implications of technological development
- Explaining how this knowledge is of value in the design of consumer and capital goods
- Carry out focused research and investigations.
- Apply the design process to a range of design problems addressing user needs and technical requirements.
- Design products that support a user experience within a social context.
- Apply a range of engineering knowledge and technical skills to resolve a design problem in a real situation.
- Design and evaluate concepts and take through to a final detailed design.
- Competently manage a project over an extended period of time and effectively manage relationships and communication with project collaborators.
- Present and communicate your design project clearly and concisely through the appropriate use of text, visualisations and illustrations, models, prototypes and engineering drawings.

12.5 Intended Learning Outcomes of Year 5

You will be reviewed or assessed on the work, as presented in your project documentation that evidences your level of engagement with and the quality of achievement of the intended learning outcomes for PDE5 listed here. In particular, by the end of this course you should be able to;

- Carry out focused research and investigations.
- Apply the design engineering process to a range of design problems addressing user needs and technical requirements.
- Design products that support a user experience within a social context.
- Apply a range of engineering knowledge and technical skills to resolve a design problem in a real situation.
- Design and evaluate concepts and take through to a final detailed design.
- Competently manage a project over an extended period of time and effectively manage your relationship and communication with project collaborators.
- Present and communicate your design project clearly and concisely through the appropriate use of text, visualisations and illustrations, models, prototypes and engineering drawings.
- Understanding the issues and areas of human factors crucial to successful user-centred design
- Confidently using human factors methods and tools as a vital part of product research, specification, development and refinement
- Understanding current standard sources of human factors data
- Clearly demonstrating the use of human factors considerations in design project work through an iterative process

- Understanding and applying anthropometrics software packages
- Developing skills in user research methodologies
- Integrating human factors aspects alongside other engineering and design issues to create a successful project resolution.

13. Learning and Teaching Approaches:

The joint nature of the PDE programme delivers a curriculum with two distinct elements which are complementary and integrated: studio practice at the GSA, and engineering theory lectures and labs at the University of Glasgow.

The GSA studio programme is essentially skill-and project-based, and learning and teaching methods are devised to develop and enhance creativity and individual thinking processes, and to promote self-motivation and independent learning

The University of Glasgow programme is primarily delivered through lectures, tutorials and laboratories.

Teaching and Learning Methods
Throughout the programme the following learning and teaching methods may be used:

Project work
Project work, is the primary means for the development of design and specialist practice within the PDE studio programme. It may be based on team or individual activity, but in either case, you are encouraged to make the most of the studio environment to promote shared learning with peers, as well as receiving structured or informal teaching from staff.

Written project briefs with aims and learning outcomes, timescales and assessment criteria are set for all projects and normally conclude with a group and/or individual critical review focused on individual outcomes.

In the earlier years of the programme, projects are staff-directed, but as students progress through the years, they will be given a greater level of choice, and will be expected to be increasingly self- directed, both in the selection of project topic, and in the means of pursuing investigation and outcomes.

Project briefings are staff-led introductions, at formally-timetabled class or group meetings. Reviews of work-in-progress and completed project outcomes are normally part of the project structure.

Lectures
Formal presentations by staff or by visiting practitioners or experts, which provide a context for course work and enable you to become familiar with the issues of design practice, theory and history, within a broader professional and cultural context.

Seminars
Structured group discussions, either staff- or student-led, on a prepared topic or a range of issues. The importance of seminars lies in your making use of the interchange of knowledge and expertise, which already exists within the group (students, staff and external experts). Appropriate preparation and full participation from all students is expected.

Discussion groups
Staff-led structured groups which are designed to underpin learning gained in lectures or about project-related topics.

Practical workshops, Laboratories & demonstrations
These are used to introduce practical processes or thinking methods and to develop technical knowledge and transferable skills. They are led by tutors, and/or visiting staff and supported by technical staff where appropriate. At some levels of the programme, industry workshops may complement project activity to facilitate a particular focus and development.

Presentations
Students will be asked to prepare and present work for consideration, evaluation and discussion with peers and staff.

14. Assessment Methods:

Students are encouraged to understand assessment as constructive and positive, and an essential guide to your learning experience. Remember that success is very often the result of learning from experience and mistakes!

At each level of the PDE studio programme, student work is organized on a project basis, which, particularly in the earlier years, may be in the form of skills development 'workshops'. Dependent on the year of study and the intended learning outcomes, projects will vary in number per session, in content, in duration, in degree of complexity, in individual and team response and in the nature of the 'deliverables' students are asked to submit for assessment.

Types of assessment

Within the PDE studio programme (and indeed throughout the GSA) a combination of formative and summative assessment methods are used.

Formative assessments are essentially advisory. They are intended to:
- be constructive and supportive reviews
- indicate your areas of strength and weakness
- identify students at risk of failure
- provide you with feedback and advice for your future direction
- involve your own self-assessment

Engagement with formative assessment is a mandatory requirement.

Summative assessments are essentially final, and are used for establishing grades which will be submitted to an examination board. They are intended to:
- assess your suitability for progression to the next academic year
- indicate your areas of strength and weakness
- if scheduled during a session, or if you are continuing-on to the next session, provide you with feedback and advice for your future direction
- if necessary (for continuing students), provide advice for the re-submission of project work

Depending on the structure of a level or a project, a formative assessment may also be referred to as an Interim Review; a summative assessment may be referred to as a Final Assessment.

The exact timing of formative and summative assessments within a particular level of study will depend on its structure and timetable. The final assessment at the end of Semester 2 of any session will always be summative. It is also likely that Semester 1 will end with either a formative or summative assessment. If a project continues for some weeks, it may well have a formative assessment part-way through, which would act as a progress review to assist and direct students during the next part of the project.

If a summative assessment is scheduled during a session, the mark from it will be carried forward to the end of the session and combined with other studio marks to give an overall result for the session (and the year).

The main methods of assessment in PDE are:

- Course work and project outputs
- Reports, Including Technical, Laboratory and Project Management
- Exams

Elements of PDE study will include all of the above and staff will explain the balance at the beginning of an academic session, or no later than the beginning of the relevant semester. It will also be made clear whether or not any particular assessment weighting will be applied (for instance, a team project might carry different weighting from an individual project).

The staff team for each level of study will make clear what assessments will take place, when they will occur, and whether they are formative or summative.

The assessment team will be drawn from members of full-time or part-time staff or others who have familiarity with the PDE programme.

Code of Assessment
Your PDE studio work is assessed in accordance with the GSA and University of Glasgow Code of Assessment.
http://www.gla.ac.uk/services/senateoffice/policies/assessment/codeofassessment/guide/

15. Relevant QAA Subject Benchmark Statements and Other External or Internal Reference Points:

http://www.qaa.ac.uk/en/Publications/Documents/Subject-benchmark-statement-Engineering-.pdf

http://www.qaa.ac.uk/en/Publications/Documents/Subject-benchmark-statement---Art-and-design-.pdf

16. Additional Relevant Information:

Students on the PDE programme may collaborate with undergraduates so long as the nature and the extent of the collaboration is negotiated and agreed by the undergraduates Head of Department.

Students on the PDE programme may wish to source/employ manufacturers/outworkers, again this must be made explicit and accountable as part of the Project Documentation and requires the authorisation of the Head of Department and Programme Leader.

Archives and Collections Centre (ACC) The School has one of the largest and most important museum and archive collections of any UK art school and these provide an excellent study resource.

The institutional archive dates back to the School's foundation in 1845 and documents over 150 years of art, design and architectural education at the School through official papers, correspondence, photographs and press cuttings relating to the School, its staff and students. Together with over 30 Deposited Archive Collections, the size and significance of the archive continues to grow.

Cross GSA workshops Students on the PDE programme also have access to specialist workshops across GSA, however the formal mechanism for accessing these facilities is via the Programme Leader who will negotiate with the relevant Head of

University of Glasgow Mechanical Engineering workshops Students on the PDE programme also have access to specialist University of Glasgow, Mechanical Engineering workshops, however the formal mechanism for accessing these facilities is via the Programme Leader who will negotiate with the relevant Head of Department.