Imperial College London

# Department of Mechanical Engineering XPD Activity Plan

If you want Imperial to recognise an extracurricular activity for ECTS and IMechE to count it as mentored professional development towards CEng status, please:

1. Read ***Completing an XPD Activity Plan*** in your Handbook, then
2. Complete Sections 1-3 of this form **before** you **begin the activity**.

## 1 Details of planned activity

| Your CID number | Surname | Initials |
|---|---|---|
| | | |

**College Extracurricular course**

| Course code | Course title | Start date | End date |
|---|---|---|---|
| | | | |

**Industrial Internship or placement**

| | | | | | |
|---|---|---|---|---|---|
| Employing Organisation | | | | | |
| Supervisor | | | | | |
| Start date | | End date | | Duration (w)* | |

**UROP or other research placement**

| | | | | | |
|---|---|---|---|---|---|
| Employing Organisation | | | | | |
| Project title | | | | | |
| Supervisor | | | | | |
| Start date | | End date | | Duration (w)* | |

## 2 Planned development objectives

| Explain briefly how you expect this activity to contribute to your Personal Development Plan. |
|---|
| |

| Approved by Personal Tutor | Signature | Date |
|---|---|---|
| | | |

* Activity durations should be given in **full-time** (37h) weeks, and **must not include term weeks**.

# 3 Intended training objectives

For industrial or research placements Training Objectives must be identified in advance, by agreement with your supervisor.

For a 6-8 week placement, identify **three** Training Objectives (see Notes); for a 9-12 week placement identify **four**.

| TBP code | Brief description of relevance to your activity | Assessed 1-4 on completion |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

| Name of industrial or research supervisor |
|---|
| |

**Please return a COPY of this form, with Sections 1-3 completed, to the Undergraduate Office BEFORE BEGINNING THE ACTIVITY**

# 4 Assessment and completion of activity

| Name of industrial or research assessor | Signature (on assessment) | Date |
|---|---|---|
| | | |

**Please return this form, SIGNED BY THE ASSESSOR, to the Undergraduate Office ON COMPLETING THE ACTIVITY**

# Notes: Training Objectives for Undergraduate Students

The mentor will need to assess the undergraduate against the training objectives at the end of each placement. This will be done by scoring the student at a level 1-4 for each Objective area. The scoring levels for each objective are defined below.

## TBP-1 Personal development

**TBP-1.1 Self Management — the ability to control and direct own training, career and efforts**

4 Confident, able to negotiate own requirements & accept responsibility.
3 Works towards personal goals using available resources, with minimum guidance.
2 Accepts responsibility but requires prompting to work towards goals.
1 Has difficulty identifying personal goals and appropriate resources.

**TBP-1.2 Communication skills — the ability to give a complete and concise account of a situation, either orally or written**

4 Always clear and accurate, high standard of presentation; can communicate with people at all levels.
3 Reasonable presentation and generally accurate in content; rarely has difficulty making a point.
2 Usually easy to understand; has difficulty presenting to people at all levels.
1 Tendency to be inaccurate and has difficulty conveying information in any form.

**TBP-1.3 Comprehension —the ability to understand and interpret instructions**

4 Understands well at first attempt, readily grasps new ideas and concepts.
3 Does not normally require additional information or explanation to complete a task.
2 Sometimes requires additional information or explanation.
1 Frequently needs additional information or explanation and takes time to grasp new ideas and concepts.

**TBP-1.4 Personal/social skills — the ability to work with others and gain respect**

4 Works well in a group or team and establishes good relationships with people at all levels.
3 Works in a group or team, good relationships at own level.
2 Attempts to mix and make a contribution.
1 Prefers to work alone and has difficulty establishing good relationships.

## TBP-2 Technical development

**TBP-2.1 Engineering practice — the ability to apply sound engineering practices**

4 Fully able to select materials, processes and components to customer specification.
3 Able to advise on suitable materials, processes and components.

2 Able to select and specify from organisation's own capabilities of manufacture.

1 Has difficulty selecting suitable materials, processes and components.

**TBP-2.2 Engineering principles — the ability to apply sound engineering principles and technical judgement**

4 Fully able to apply engineering principles to design, development and research activities.

3 Able to apply established procedures.

2 Needs some guidance on the application of engineering principles.

1 Needs frequent guidance on the application of suitable engineering principles.

**TBP-2.3 Problem solving — the ability to originate new and improved uses of people and resources**

4 Excellent problem solver; can propose innovative solutions.

3 Good understanding and useful innovator.

2 Puts forward some ideas but has difficulty with decisions.

1 Usually able to follow set procedures but shows little capability at proposing new solutions.

**TBP-2.4 Technical achievement — the ability to translate knowledge and skills into achieving results**

4 Quickly develops skills and achieves excellent results without prompting.

3 Achieves well with little supervision.

2 Average ability in achieving results but hesitant with little initiative.

1 Usually needs supervision and assistance to achieve tasks.

## TBP-3 Business development

**TBP-3.1 Commercial and financial implications — the ability to see engineering in a business environment**

4 Fully aware of the commercial and financial implications of the task in hand.

3 Generally aware of implications but sometimes needs clarification on particular points.

2 Only aware of the business environment when seconded to a commercial department.

1 Limited awareness of any commercial / financial ramifications.

**TBP-3.2 Organisation skills — the ability to structure circumstances to a given objective**

4 Fully aware of the importance of planning and scheduling dependent on changing circumstances and tasks.

3 Usually organises well but sometimes needs guidance on some areas of planning.

2 Average ability but needs reminders on critical factors.

1 Muddled approach and unable to set priorities.