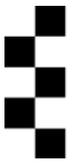


**Department of Mathematical Sciences: Standard Milestones for PhD Students – 2019-20
Entry**

Milestones	Criteria for progress	Deliverables	Deadline
M1: Progress to Year 2 (or equivalent for parttime students)	A: Assess training needs and knowledge required to undertake research project and complete the thesis.	<ul style="list-style-type: none"> ▪ Training Needs Analysis to be completed. ▪ Attend Proficio courses and plan for further courses to attend, as appropriate. 	<ul style="list-style-type: none"> ▪ Term 1 for full-time students; Term 2 for part-time students ▪ By end of Term 3 for full-time students; Term 6 for part-time students
	B: Choose/narrow down the research topic and demonstrate significance/impact of research.	<p>Research Project Proposal, including (dependent on subject area):</p> <ul style="list-style-type: none"> ▪ Write central research problem/questions to be answered. ▪ Methodological considerations. ▪ Feasibility Report – identifying sources, access and ethical considerations ▪ Create project plan, outlining objectives for each stage. 	By the second panel Meeting (or Term 3 for full-time students; Term 6 for part-time students)
	C: Demonstration of effective project management through the setting of research goals and prioritisation of activities.	<ul style="list-style-type: none"> ▪ Create a detailed, realistic plan of work/timetable for Year 2. ▪ Produce supervisory panel report written in a clear and selfreflective style 	By the second panel Meeting (or Term 3 for full-time students; Term 6 for part-time students)
	D: Subject-specific milestones		
M2: Confirmation	A: Demonstrate understanding of chosen topic within the context of the field.	<ul style="list-style-type: none"> ▪ Critical Literature Review (where relevant) 	By Confirmation Board (Term 4 for full-time students; Term 7 for part-time students)

	<p>B: Demonstrate the ability to produce work of the quality and quantity in order to complete within the standard period.</p>	<ul style="list-style-type: none"> ▪ Evidence that academic writing is of standard and ability expected at PhD level, including adequate referencing and language skills. ▪ clearly identify the major research questions which have not been addressed by others ▪ confirm that adequate resources for completion of the thesis are available 	<p>By Confirmation Board (Term 4 for full-time students; Term 7 for part-time students)</p>
	<p>C: Subject-specific milestones</p> <p>Students must have gained an in depth understanding of their chosen field of study. They must have made significant progress on experimental or theoretical work proposed, with some early results. Students should demonstrate an ability to analyse in depth, and critically evaluate, key published work.</p>	<p>Full progress report (8 - 10,000 words in most cases, but a shorter report accompanied by a clear summary of relevant results /work may be acceptable [with the supervisor's approval]</p> <p>If appropriate, evidence of the draft of a first journal, workshop, symposium, or conference paper is desirable.</p>	<p>By Confirmation Board (Term 4 for full-time students; Term 7 for part-time students)</p>
<p>M3: Progress from Year 2 to Year 3 (or equivalent for part-time students)</p>	<p>A: Review training needs and knowledge required to continue with research project and complete the thesis.</p>	<ul style="list-style-type: none"> ▪ Training Needs Analysis to be reviewed. ▪ Attend Proficio courses and plan for further courses to attend, as appropriate. 	<ul style="list-style-type: none"> ▪ Term 4 for full-time students; Term 7 for part-time students ▪ By end of Term 6 for full-time students; Term 12 for part-time students
	<p>B: Demonstrate work of the quality and quantity expected at the end of Year 2</p>	<ul style="list-style-type: none"> ▪ Produce 2 draft chapters ▪ Report on research undertaken to date 	<p>By end of year Supervisory Panel (Term 6 for full-time students; Term 12 for part-time students)</p>

	<p>C: Review significance and impact of research and articulate output.</p>	<p>For example:</p> <ul style="list-style-type: none"> ▪ Deliver workshop ▪ Present research to students and staff at seminars/conferences ▪ Write journal articles 	<p>By end of year Supervisory Panel (Term 6 for full-time students; Term 12 for part-time students)</p>
	<p>D: Demonstration of effective project management through the setting of research goals and prioritisation of activities.</p>	<ul style="list-style-type: none"> • Create a detailed, realistic plan of work/timetable for Year 3. • Produce supervisory panel report written in a clear and self-reflective style 	<p>By end of year Supervisory Panel (Term 6 for full-time students; Term 12 for part-time students)</p>
	<p>E: Subject-specific milestones Half of experimental or theoretical work should be essentially complete. Further publications or plans for publications should have occurred, possibly involving a journal publication.</p>	<ul style="list-style-type: none"> • If possible, submission of first journal, workshop, symposium, or conference paper. 	<p>By end of year Supervisory Panel (Term 6 for full-time students; Term 12 for part-time students)</p>
<p>M4: Year 3 (or equivalent for part-time students)</p>	<p>A: Ability to reflect on skills and knowledge development and its application to the research project</p>	<ul style="list-style-type: none"> • Training Needs Analysis reviewed 	<p>By the Term 7 progress panel for full-time students; Term 15 for part-time students</p>
	<p>B: Demonstrate work of the quality and quantity expected when nearing submission</p>	<ul style="list-style-type: none"> • Research completed (experimental, empirical and theoretical work, where relevant) 	<p>By the Term 7 progress panel for full-time students; Term 15 for part-time students</p>
	<p>C: Clear evidence of progress towards submission</p>	<ul style="list-style-type: none"> • Completed final draft of thesis for supervisor(s)/supervisory panel comment 	<p>By interim Supervisory Panel prior to submission/Term 7/8 for full-time students; Term 15 to 16 for part-time students)</p>
	<p>D: Subject-specific milestones</p>	<ul style="list-style-type: none"> • Review publication(s) so far and plan further ones if enough unpublished results have been produced. 	<p>By interim Supervisory Panel prior to submission / Term 7/8 for full-time students; Term 15 to 16 for part-time students</p>



If required: M4: Request to enter Completion period	A: Clear plan to submission	<ul style="list-style-type: none">• Timeline of work needing to take place before submission Submission date agreed	Timeline agreed by Supervisory panel.
	B: Subject-specific milestones	<ul style="list-style-type: none">• Review publication(s) so far and plan further ones if enough unpublished results have been produced.	