

Project unit introduction

COMS30044/COMS30045/COMSM0052 2021

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Two minor points

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(Unless you're a third year Maths/CS MEng student, in which case you're taking COMS30044 and it's 20 credit points. But you should still take it seriously!)

RTFH

(Read The Friendly Handbook)

CS offers three versions of this unit.

- **COMS30045:** Taken by final-year BSc students. The baseline.
- **COMSM0052:** Taken by final-year MEng students.
Higher expectations and a 5cp innovation case component.
- **COMS30044:** Taken by third-year Maths/CS MEng students.
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Overview of project units

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All three units involve spending TB1 finding a supervisor, then spending TB2 doing something interesting and writing a dissertation based on it.

The process is **identical** between them.

A rough timeline

Weeks 1–3: Start thinking about your project, Q&A's in Weeks 2 and 3.

Week 4–5: Release of project suggestions and available supervisors.
In-person event if you're having trouble (details TBD).

End of Week 8: Deadline for finding a supervisor and starting preliminary work. Must also complete ethics training.

Weeks 9–11: Take-home exams for TB1 units.
(So you won't have time to find a supervisor!)

Week 13: Start of TB2, serious project work begins.

Week 19: Innovation case deadline (COMSM0052 only).

Week 22: Project poster day, optional second marker meeting.

Week 24: Deadline for dissertation. (Extensions will be rare!)

May 16th–June 6th: Vivas.

How to come up with a project?

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you get to work on your own idea!

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Some First-quality projects from last year:

- Building an app that turns C# code into music;
- Simulating the spread of worms in realistic network models;
- Examining the use of discriminatory metaphors in computer science;
- Implementing a proof that Super Mario World is PSPACE-hard.

More on the unit website!

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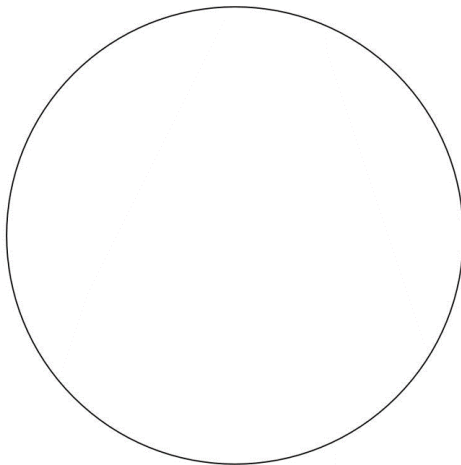
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- If you need access to physical equipment on campus, you should have a backup plan in case of lockdown.

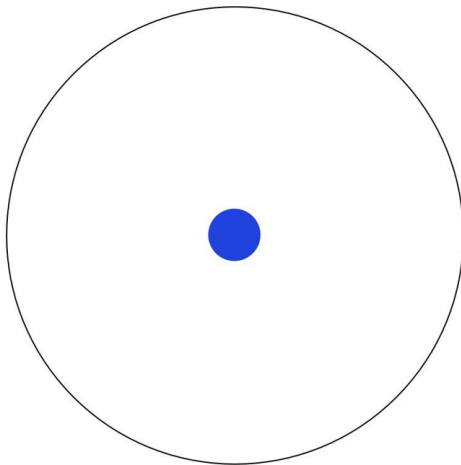
What research is like

Imagine a circle that contains all of human knowledge:



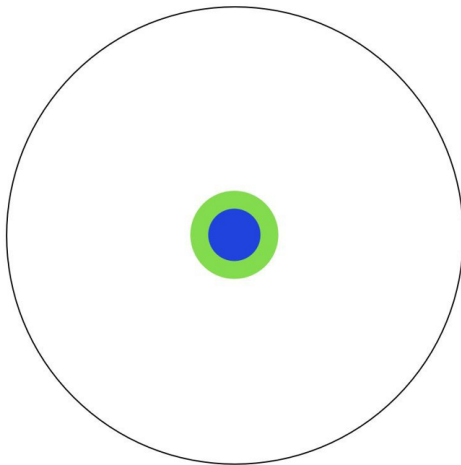
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By the time you finish primary school, you know a little:



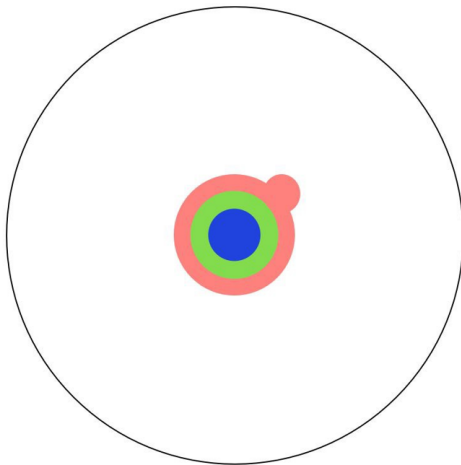
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By the time you finish secondary school, you know a bit more:



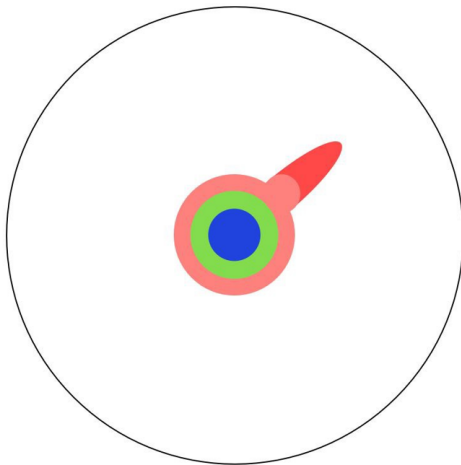
What research is like

With a bachelor's degree, you gain a specialty:



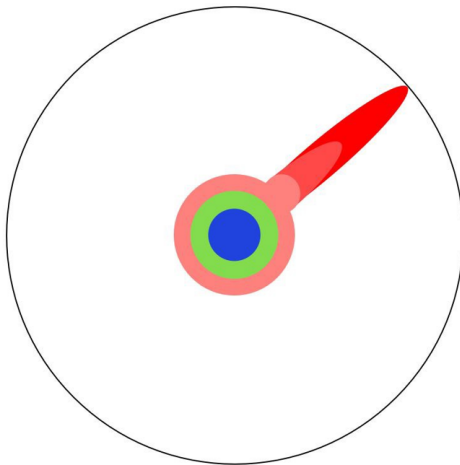
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A master's degree deepens that specialty:



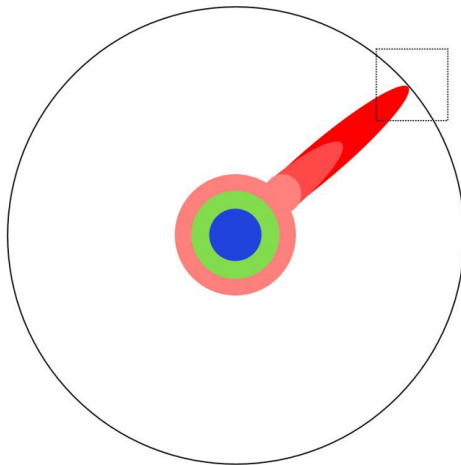
What research is like

Reading research papers takes you to the edge of human knowledge:



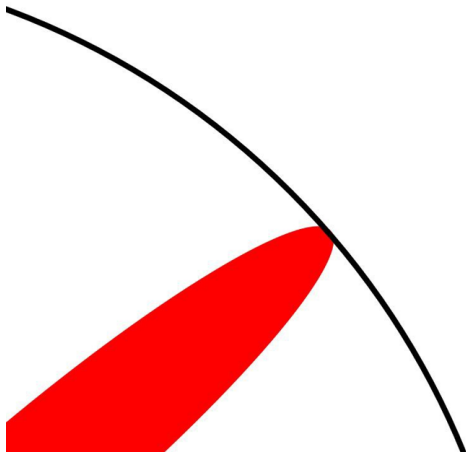
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Once you're at the boundary, you focus:



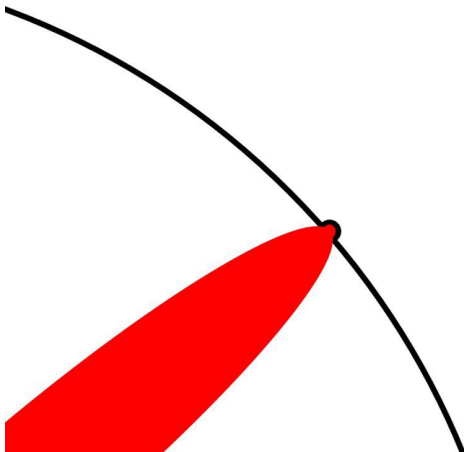
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You push at the boundary for a few years:



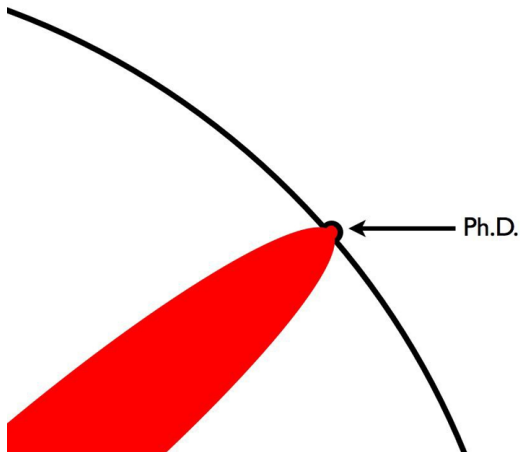
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Until, one day, the boundary gives way:



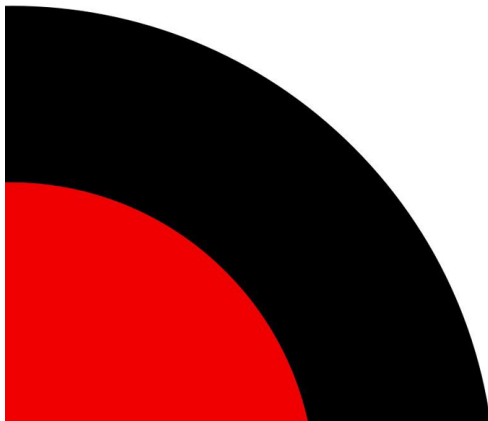
What research is like

And that dent you've made is called a Ph.D.:



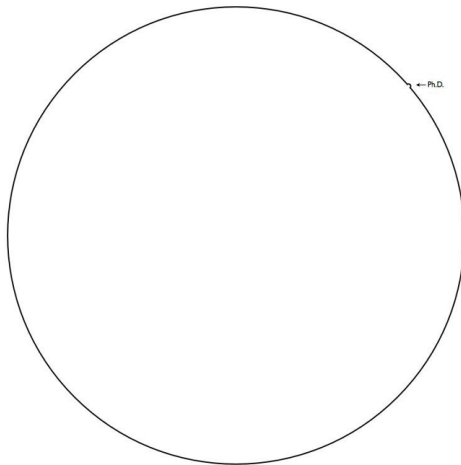
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Of course, the world looks different to you now:



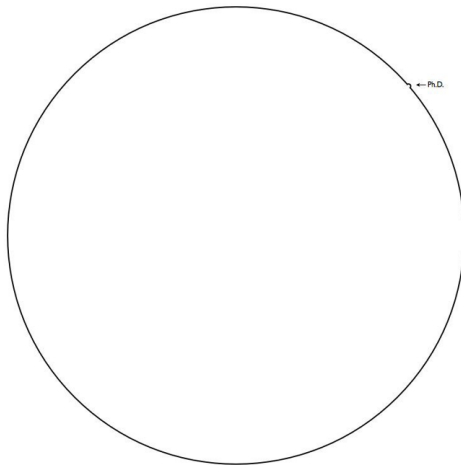
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So don't forget the bigger picture:



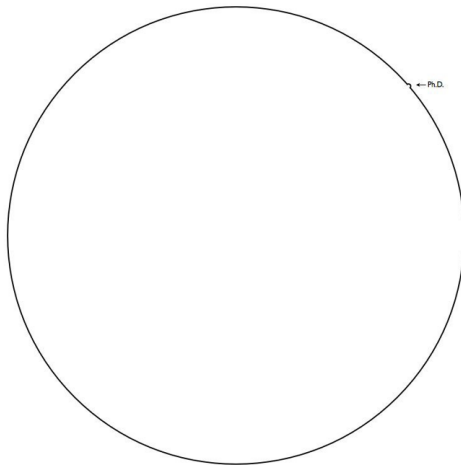
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So don't forget the bigger picture: Keep pushing.



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(And also cite your sources: [The illustrated guide to a Ph.D.!](#))

Finding a supervisor

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In week 4, we'll release a spreadsheet with a list of possible supervisors. Each entry will have:

- Some **suggested** (not compulsory!) projects;
- A list of keywords for projects they're interested in;
- A brief description of their supervision style;
- How many more students they're able to supervise (auto-updated).

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2pm–4pm Wednesday Week 5: “Project matching session”, Bill Brown.

This is **optional**, for people who are having trouble finding a supervisor or thinking of a project.

Details are still TBD, but likely to be standing around chatting with possible supervisors.

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- Don't worry about etiquette except for not getting honorifics wrong. ("Dear Tilo" is fine. "Dear Dr./Prof. Burghardt" is fine, but make sure you get the right one. "Dear Mr. Tilo" will get an eyeroll...)

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- Give general guidance on writing your dissertation and look over a 5-page draft excerpt in detail before a meeting.

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This makes it a **bad idea** to rely on your supervisor for low-level guidance, e.g. “Your code won’t compile because of this missing semi-colon”.

Tracking down the semi-colon could take up a whole meeting...

Treat contact time with them as a limited resource. If you can’t finish your project without more contact time, scale down your project rather than trying to scale up your contact time!

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The form will go live in week 4 alongside the spreadsheet, and is due on November 18th (end of Week 8).

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We'll be putting out a video with more details, along with a Blackboard quiz. You **cannot** submit your project spec without passing this quiz. If you don't pass it before TB2, then you won't graduate.

(**Good news:** You can retake as often as you want! So we don't actually expect anyone to fail their degree this way.)

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Online Q&As on Tuesdays of Weeks 2 and 3 for further questions.
(Or ask in the unit team!)

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