

Institute of Astronomy

Postgraduate Open Day - MAST

Wednesday 4 November 2020 11.00am – 12.00pm

Question and Answer session

Q- How many Exams we should take before you accept our application?

A- Send in your transcript with a covering email to admissions@ast.cam.ac.uk and then we can offer advice.

Q- Are all the projects set or are students also able to develop a research question with potential supervisors?

A- Projects are set and published in advance and students are asked to rank their preferred options. You can see an example of this year's projects here

<https://www.ast.cam.ac.uk/sites/default/files/Part III and MAST Project Booklet 2020 2021.pdf>

Q- My undergraduate degree is B. Tech Engineering Physics with Astrophysics internships, I'd like to know if merely going through lecture notes of Astrophysics Part II would help me cope with the MAST programme? I have a first class with distinction and I have completed courses in all core subjects of Physics.

A- This would depend on the subjects taken during your undergraduate degree. Send in your transcript with a covering email to admissions@ast.cam.ac.uk and advice can be given.

Q- What will the interview be like?

A- Informal chat. Friendly, exploring your qualifications and experience. We will ask you questions about your favourite subjects and about your research experience (if any).

Q- How will second year results (achieved during covid) affect my application?

A- Results and academic track record can be reviewed case by case.

Q- Is there any solution for the IELTS degree? it is so high for us as an International Students 😊❤️

A- It is high but a good standard of English is needed for this complex course. It is a busy, pressurised course. You need your language skills before you join. You won't have time to improve your language during the course. You don't need to have completed the exam before sending in your application but will need to meet the required standard set as one of the conditions of your offer.

Q- Where do students typically go after the MAST? Do most go on to do a PhD at Cambridge/other institutions?

A- Typically students go on to a PhD. Your academic record prior to your MAST will be important for your PhD application because of the timing of applications. PhD application need to be sorted out by the end of Michaelmas, meaning you won't have much time to engage with the Course before you apply.

Q - What computing skills would you recommend students have apart from Python, Matlab and LATEX?

A- Python is recommended, it's very much the working horse of Astronomy and is also a very transferable skill to elsewhere in life.

Q - You mentioned needing applied physics experiences during previous studies, how important would it be to have such skills for this master's? As I understand it most modules and projects are theoretical and computational oriented with little observational components or lab work?

A- Astronomy is not a lab science but it is driven by observation. Many of our courses will involve understanding of how the instruments will work. Much of the course work is analytical and mathematical and so the foundations must be understood.

Q - Is it possible to change courses from MAST Astrophysics to, say, MAST Pure/Applied Mathematics?

A- This is unusual and unlikely; it would need to be a special case and would require special treatment. You could apply to both courses individually if you're not sure at this early stage but a separate application (& fee) would need to be made.

Q - You mentioned research experience, even outside Astrophysics is viewed as positive in terms of preparation for the course. Is that something you would like us to elaborate on in our applications? Is there something in particular you would like us to focus on in the application?

A- Mention your experience in your application. We are interested in any independent experience you have.

Q - I am doing my BSc in Physics from an Indian university and as part of my FYBSc. I have to write a thesis (10,000 words) would that be counted as sufficient research experience?

A- Please mention this experience and when we talk to you we will be able to understand if this is sufficient.

Q - Could you tell us a little bit about the structure of the courses/modules and teaching methods? Are they mostly lectures or also exercises?

A-They are both. Lectures are interactive with discussion within lectures and live Q&A sessions now with pre-recorded lectures. There will also be small group supervisions and examples classes.

Q - Could I apply to the program while I am in my last year BSc in physics?

A-We would normally expect people to apply when they are within their last year of their undergraduate degree.

Q - In the application there is a section of supporting information, what exactly would be expected to be mentioned in that?

A-Anything else that you think it would be helpful for us to know. Anything to do with Astrophysics, it would be useful for you to highlight what experience you have so far and how you found it. Together with your research and computing experience. If your academic track is somewhat unusual (e.g. you switched course, took more classes, had an intermission etc) this is also a good place to explain it.

Q - is there visitation to any Observatories to do actual observing?

A - Not as part of your project. It is difficult to organise and arrange. It is likely you will be working with fresh data from an observatory.

Q - Do we have to take the OBS test like the NatSci 3rd year students?

A- You will not need to take this. There are no tests, entry is based on your application and interview.

Q - How important are reference letters?

A- It depends on your trajectory. Some pathways to your Master's degree can be complicated. Anything unusual or interesting would be very useful for your referee to highlight and elucidate. We would like the referees not to merely state your qualifications (we can see these in your transcript) but point out how independent, pro-active, imaginative you are.

Q - Are students working with both IoA and Cavendish researchers in their projects?

A- We try not to distinguish. Also some projects involve cooperation with scientists from other institutions.

Q - What are most of the data sets we would be expected to work with? Are they specific to Cambridge or more common ones like the SDSS?

A- We use all data that is available, that is the best, cutting-edge and recent data. You can see in our booklet what we will be working with eg Sloane or Gaia public and also proprietary data.