

FOOD SCIENCE AND TECHNOLOGY (FST) FAQs NUS e-OPEN HOUSE 2020

GENERAL APPLICATION PROCEDURE ENTRY REQUIREMENT

GENERAL

1. What is Food Science and Technology (FST)?

Food Science is the discipline in which biology, physical sciences, and engineering are used to study the nature of foods, the causes of their deterioration, and the principles underlying food processing.

Food Technology is the application of food science to the selection, preservation, processing, packaging, distribution, and use of safe, nutritious and wholesome food.

2. What will I learn in FST? What degree will I get at the end of my studies?

FST is a multidisciplinary subject which covers areas in Chemistry, Biology, Engineering, Nutrition, Microbiology, etc. FST is NOT meant to enhance your culinary skills. FST primary major undergraduates are required to spend one semester for industrial attachment with food related companies. As such, students in the FST primary major programme are given the opportunities to learn basic sciences through applications in everyday life in the field of FST. FST graduates will receive a B.Sc. or B.Sc. (Hons).

3. When did the Department of Food Science and Technology (FST) come into existence?

FST major was originally a programme attached to the Department of Chemistry in the Faculty of Science from 1999 to 2019. On 1st January 2020, FST became an independent department. It is the first FST department and currently the only one in Singapore's university sector. NUS FST has over 20 years of experience producing graduates to support the manpower needs of this sector.

4. What is the role of Food Scientist or Food Technologist in the Industry?

Food Scientists and Food Technologists are usually working in the relevant companies, government agencies or research establishments, to help in product development, applying the findings from food science research in production, preservation, processing, packaging, distribution, and use of safe, nutritious, and wholesome food. Their roles include:

- Design and operate quality assurance systems to ensure that quality and safety are maintained during the manufacture, distribution and retailing of foods.
- Discover new food sources, analysing food content or searching for substitutes for harmful or undesirable additives.
- Develop ways to process, preserve, package, or store food according to industry and government regulations.
- Enforce government regulations, inspecting food processing areas and ensuring that sanitation, safety, quality, and waste management standards are met.

5. How is the job market / career prospect for FST graduates?

The list given here is not exhaustive: Quality control, food scientist, food technologist, food product development, research scientist, laboratory technologist, food health and safety inspector, food law enforcement officer, food technical manager, teacher, nutrition advisor, production supervisor/manager, flavour scientist/technologist, sensory scientist, technical sales and marketing, journalist etc. You can also start your own food business. Most of these jobs are provided in food and allied industries, government and non-government organisations, and in education. FST graduates have been able to find jobs locally or abroad.

6. What is the salary range for the fresh graduates?

The salary levels vary with individual qualification, experience, employment setting, scope of responsibility etc. Find out the salary range of fresh graduates from the latest Graduate Employment Survey on MOE website.

7. What is the Professional Placement Programme or where will I be attached to?

Professional Placement Programme is an Industrial Attachment Programme which is compulsory for all applied science programme. Students will be posted to local/ overseas companies for on-the-job training and exposure with a minimum period of 16weeks.

8. What is the chance to get overseas attachment?

Every year we have around 3 to 5 students posted overseas. Company will normally give a monthly allowance to help with living expenses.

9. Will there be opportunities to go abroad in the FST programme?

There are many opportunities to go abroad. Mainly, the students can go abroad by applying for the Student Exchange Programme (SEP) or applying for an industrial attachment opportunity overseas. There are also other programmes to go abroad organized by the University or student organisations. In the last few years, our students had the opportunity to join summer programmes in Japan, Costa Rica, China, Europe and Indonesia. Students in FST are strongly encouraged to participate in such activities to broaden their horizons.

10. If admitted to the programme, can I still participate in other programmes in the Faculty or University?

Many FST undergraduates participate in various other programmes in the University e.g. University Scholars Programme, Exchange Programme, Special Programme in Science, summer programme, double degree programmes, joint minor programmes, NUS overseas colleges etc. FST does not restrict students who wish to participate in any of such programmes. Students may also consider minor/s in other area to add value to their degree.

11. Are there any scholarships or awards specifically for FST students?

Awards are given based on merit to the most deserving students every year. Students may apply for scholarships when they are open for application. The date will be announced in the class or transmitted through emails to FST students. Some awards and scholarships specifically for FST students only are listed here: Nestle Scholarship, F&N Scholarship, Ingredion Scholarship, PJ Barlow Book Prize, Givaudan Food Excellence Prize, KH Roberts Student Award, Firmenich Best Honours Student Award, SIFST Best Student Award, Abbott Academic Excellence Prize, NUS Science-Seagift Merit Scholarship, etc.

12. I am interested in Nutrition, is the course about nutrition?

Nutrition modules are offered as part of Food Science and Technology course. Graduates in Food Science and Technology may practice as a Nutritionist.

13. Is FST a direct honours programme?

Yes, FST is a direct honours programme. However, a minimum CAP of 3.2 is required for one to be eligible to proceed on to the Honours year. Students who are eligible may also choose not to proceed with an honours degree. The main advantage of this type of direct honours programme is to allow students to graduate after 3 years with a B.Sc. without having to stay 4 years for the same degree. This is unlike other type of direct honours programme which requires students to stay for 4 years regardless of their CAP while only awarding the honours degree to those meeting the CAP requirement specified by the university.

14. What are the professional organisations that recognise a degree in FST?

Within Singapore, the degree is recognised by professional organisations such as the Singapore Institute of Food Science and Technology (SIFST) and Singapore National Institute of Chemistry (SNIC).

NUS FST Programme has also obtained certification from the International Union of Food Science and Technology (IUFoST).

IUFoST is the global scientific organisation for Food Science and Technology supporting programmes and projects to increase the safety and security of the world's food supply. IUFoST is a not-for-profit country member organisation, each country represented by its national food science organisation. IUFoST is one of 31 Unions worldwide elected to full membership in the International Council for Science (ICSU) and IUFoST represents food science and technology to other world bodies.

15. How is FST in NUS different from other local and overseas universities that are offering the same or similar degree?

NUS FST Programme has obtained international accreditation from IUFoST. The IUFoST accreditation certifies that the NUS FST courses meet international standards and guidelines for outcome-based academic programmes. The accreditation also facilitates mutual recognition of qualifications among the IUFoST accredited courses globally.

FST in NUS has over 20 years of experience in running the programme and has established relationship with local and multinational food companies with a proven track record. This is shown by the support we are receiving from these food companies in terms of research collaboration, scholarships and awards. Our programme is also backed strongly by our alumni who are now in the workforce.

For further more comprehensive comparison, students are encouraged to look at the curriculum offered by different universities.

In addition to the international accreditation and established track record mentioned above, NUS FST is offered as a primary major and also as a second major with primary major in Chemistry. Other universities may offer FST as a second major only. As primary major, the curriculum offered is much more comprehensive. Students are given opportunities to groom themselves in a wider variety of niche areas as they advance in the course. In addition, the faculty members in NUS FST are also highly active in conducting cutting-edge research programmes which our students can benefit from to hone their research skills under the close supervision of senior researchers including research fellows and PhD students. Students may also choose to have a double major with Chemistry as the primary major and FST as the second major.

16. What are the Graduate (postgraduate) programmes in FST?

The postgraduate programme in NUS FST includes PhD by research, MSc by research, and MSc by coursework. Candidates must have at least BSc (Hons) with CAP higher than 4.0 to be considered for admission to the MSc and PhD programmes by research. For MSc by coursework, the criteria for admission will be a little less stringent. Further information on application to these programmes can be found on our website: <u>www.fst.nus.edu.sg</u>. Historically, our graduates have secured entry to graduate programmes in a variety of areas in addition to food related areas such as medicinal science, material science, life sciences, chemistry, engineering, pharmaceutical science etc.

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APPLICATION PROCEDURE

17. What is the application procedure for the FST course in NUS?

From AY2017/2018 onwards, applicants to Food Science & Technology are directly admitted during the University Admission Exercise.

Polytechnic graduates with a good diploma in food related courses and accredited to the FST major, as well as those with exceptionally strong academic record in other relevant areas, may be considered for admission.

18. Does Food Science & Technology offer second major?

We have a second major in Food Science but the primary major has to be Chemistry.

19. Can I change my mind or am I allowed to change the major after admission?

As admission to FST is direct during the University Admission Exercise, students who wish to change to other courses will need to apply via the Office of Admissions. Nevertheless, it is not encouraged that students change their major late into their candidature as they may face difficulties in catching up with modules required by the new major.

20. When and how will I know whether I have been selected?

Applicants will be informed of the offer by the Office of Admissions directly.

ENTRY REQUIREMENT

21. What is the minimum requirement for entry for high school graduates?

Good 'A' level passes, H2 or equivalent in Chemistry and at least one other science subject (Physics, Mathematics, Computing or Biology). However, having met the minimum requirement does not guarantee one a place in FST since the cut-off point for admission differs from year to year. You may wish to refer to the Indicative Grade Profile (IGP) for the courses in NUS here: http://www.nus.edu.sg/oam/undergraduate-programmes/indicative-grade-profile-(igp).

Polytechnic graduates with a good diploma awarded in food related courses may also be considered for admission.

22. Which polytechnic diplomas can be considered for admission to FST? What modules can be exempted?

Please refer to the list of accredited polytechnic diplomas for the FST major here: <u>http://www.nus.edu.sg/oam/apply-to-nus/polytechnic-diploma-from-singapore/subject-pre-requisites</u>. As for the exemptions which polytechnic diploma holders are eligible for, please refer to the details here: <u>http://www.science.nus.edu.sg/education/undergraduate/ug-admission/advanced-placement-credits</u>.

23. Are the numbers of students admitted to FST limited? If so, how do I know the chances of admission?

The intake for the FST major varies from year to year, and the chances of admission depends on the quality of the applicant pool and the quota for that year. The IGP and number of course places for the previous admission year can be referred here: <u>http://www.nus.edu.sg/oam/undergraduate-programmes/indicative-grade-profile-(igp)</u>. You are eligible to apply as long as you meet the minimum requirement. Most importantly, you must have passion in the subject.

24. Do I have to attend an interview for admission to the FST programme?

Certain applicants may be called in for an interview, depending on the shortlisting criteria for that year.

25. Will I be disadvantaged if I do not have H2 Biology (or equivalent)?

H2 Biology is not required for admission to FST programme. However, successful applicants without H2 Biology (or equivalent) <u>must</u> take the bridging module- LSM1301 General Biology in their first semester.

For further information or answers to questions not listed above, please email us or call our mainline at 6516 1656.