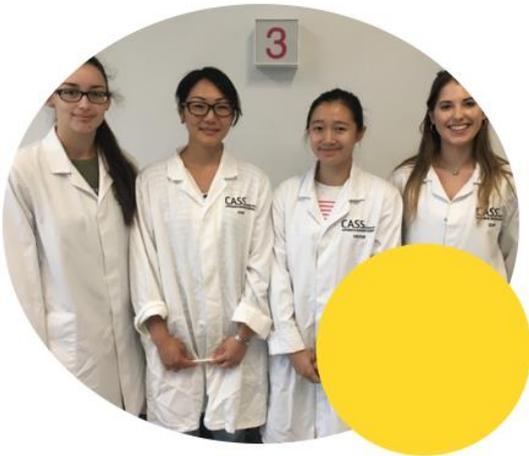


CASS-ACADEMY 2021



What is CASS-Academy?

Stand out from the graduate crowd by obtaining industry relevant work experience with the Deakin CASS-Academy while you're studying.

What is CASS-Academy

CASS-Academy is a training hub run by the Deakin CASS Food Research Centre for talented students who show an interest in the food research including: food safety, flavour analysis, sensory and consumer science, product development, behavioural nutrition and sustainability.

The selected students are provided with hands-on training alongside academic experts and other industry professionals.

After the 12-week program, students will have acquired skills, experiences and industry and academic insights into the area of sensory science.

Our objective

To identify and train students who show an interest in food science and providing them the opportunity to participate in different areas of industry relevant sensory, consumer, product development and analytical research.

Why apply?

With the number of graduates in the area of food and nutrition increasing, there is a fierce competition for graduate job positions. Employers are now placing a greater emphasis on what additional skills and experiences graduates have obtained aside from their formal university education.

CASS FOOD
RESEARCH CENTRE



What you will experience*

- Develop highly sought after industry skills, experiences and networking opportunities.
- Hands-on experience within the Deakin CASS state-of-the-art sensory and flavour research centre.
- Opportunity to co-write and contribute to research papers intended for publishing.
- Coordinate and conduct an in the field consumer science test or laboratory based experiment.
- Tour a food industry manufacturing and R&D site.
- Conditional acceptance into the sensory honours program for 2022^.
- Certificate of program completion and a letter of recommendation.

*Experiences and activities undertaken will differ depending on stream.
^Normal entry criteria and fees for the [Nutrition Honours Program \(H418\)](#) will apply.

Skills and knowledge gained

- Apply basic and advanced sensory, consumer or analytical methodologies useful in industry and research.
- Critically analyse scientific papers in the areas of consumer and sensory science, food microbiology and flavour chemistry.
- Understanding basic methodologies in the area of: sensory and consumer science, flavour chemistry, food safety, and product development.



Program Overview

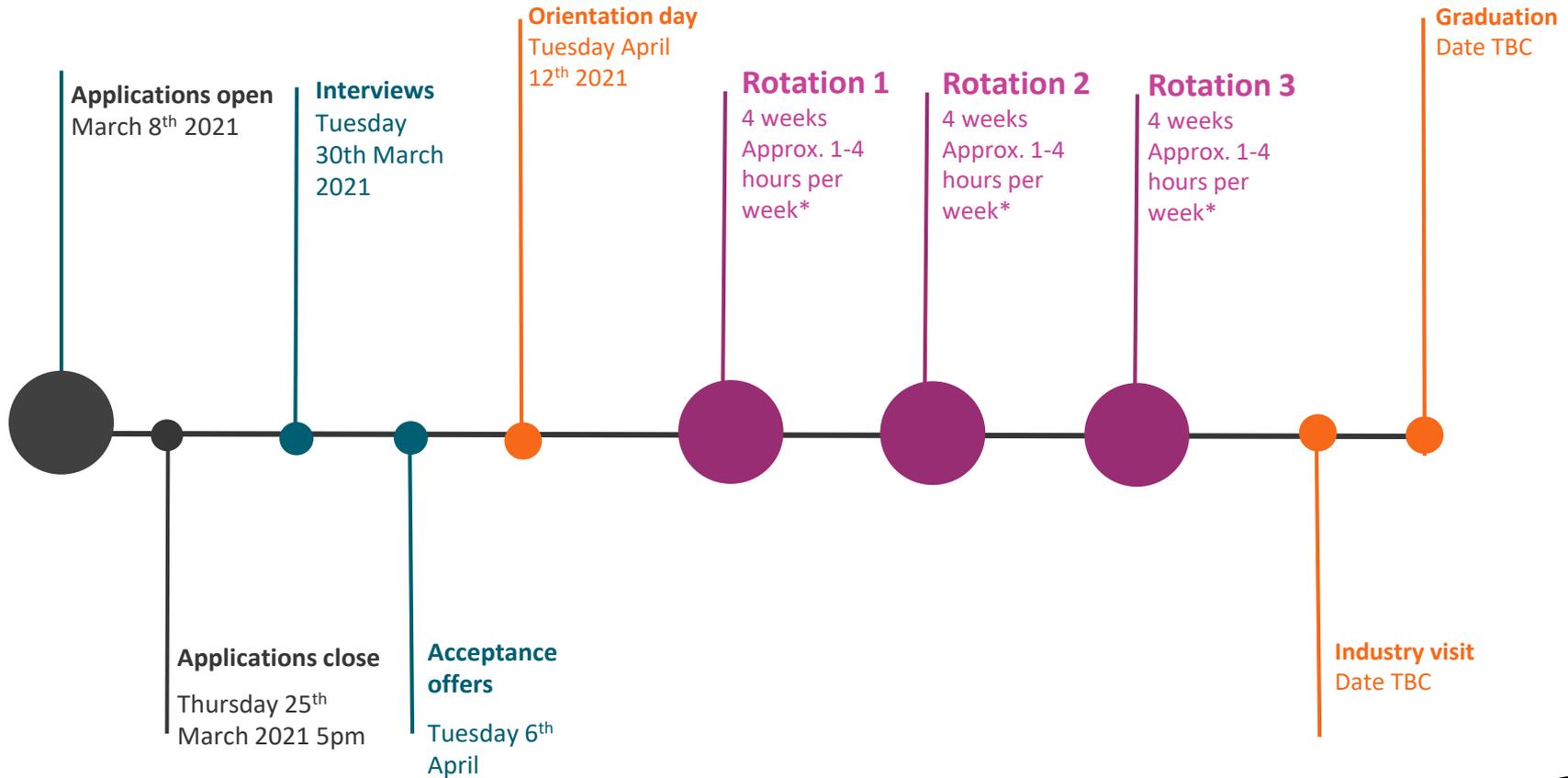
CASS-Academy outline

- CASS-Academy will run for 12 weeks starting April 19th (Introduction day 12th April 2021)
- Three streams - successful applicants will complete one stream only.
 - Sensory and consumer science
 - Flavour analysis and food safety
 - Product development and sustainability
- There are 3 rotations in each stream, each spanning across 4 consecutive weeks.
- Approximately 1-4 contact hours per week.
- The CASS-Academy program is designed to be flexible and work with most of the students' availabilities. We try our hardest to be flexible with students' timetables and usual work hours. However, some of the program dates are set and clashes with personal commitments may be unavoidable. Please contact CASS if you have any questions regarding timetabling of the Academy.
- Please note stream 2, rotation 2 (food safety) and stream 3, rotation 2 (product development) will run during the trimester break.



Program Overview

CASS-Academy outline



*Contact hours may vary each week within rotations. This is the maximum time required within a week. Dates are subject to change.

5 **Note:** You are also invited to attend our one hour tri-weekly CASS research meetings.

What happens during a rotation?

Each rotation, students will be taught and mentored by our academic experts on how to conduct and execute various research methodologies, analyse data, write and present reports.

After the last week of each rotation, students will present their experiences and project findings to the CASS department with an oral presentation and submission of a short written report.

The successful completion of each rotation will be marked with a badge on their program graduate certificate.

The following provides an outline of a rotation:

- **Week 1:** Training or journal article analysis on rotation topic
- **Week 2:** Practical data collection (laboratory or in-field)
- **Week 3:** Data analysis
- **Week 4:** Presentation compilation
- **Presentation:** Rotation presentation to be presented to the CASS team on the Tuesday following the end of week 4.



Stream breakdown and important dates

Stream 1:

Sensory and consumer science

QDA

- Week 1: Monday 19th– Friday 23rd April
- Week 2: Monday 3rd – Friday 7th May
- Week 3: Monday 10th – Friday 14th May
- Week 4: Monday 17th – Friday 21st May
- JC Presentation: Tuesday 25th May

Consumer Science

- Week 1: Monday 12th – Friday 16th July
- Week 2: Monday 19th – Friday 23rd July
- Week 3: Monday 26th – Friday 30th July
- Week 4: Monday 2nd August – Friday 6th August
- JC Presentation: Tuesday 10th August

Data analysis

- Week 1: Monday 9th August – Friday 13th August
- Week 2: Monday 23rd – Friday 27th August
- Week 3: Monday 30th August – Friday 4th September
- Week 4: Monday 13th – Friday 17th September
- JC Presentation: Tuesday 21st September

Stream 2:

Flavour analysis and food safety

Flavour analysis

- Week 1: Monday 19th– Friday 23rd April
- Week 2: Tuesday 27th – Friday 30th April
- Week 3: Monday 3rd – Friday 7th May
- Week 4: Monday 10th – Friday 14th May
- JC Presentation: Tuesday 25th May

Food Safety*

- Week 1: Monday 21st – Friday 25th June
- Week 2: Monday 28th June – Friday 2nd July
- Week 3: Monday 5th – Friday 9th July
- Week 4: Monday 12th – Friday 16th July
- JC presentation: Tuesday 20th July

Data analysis

- Week 1: Monday 9th August – Friday 13th August
- Week 2: Monday 23rd – Friday 27th August
- Week 3: Monday 30th August – Friday 4th September
- Week 4: Monday 13th – Friday 17th September
- JC Presentation: Tuesday 21st September

Stream 3:

Product development and sustainability

Sustainability

- Week 1: Monday 19th– Friday 23rd April
- Week 2: Tuesday 27th – Friday 30th April
- Week 3: Monday 3rd – Friday 7th May
- Week 4: Monday 10th – Friday 14th May
- JC Presentation: Tuesday 25th May

Product development*

- Week 1: Monday 21st – Friday 25th June
- Week 2: Monday 28th June – Friday 2nd July
- Week 3: Monday 5th – Friday 9th July
- Week 4: Monday 12th – Friday 16th July
- JC presentation: Tuesday 20th July

Data analysis

- Week 1: Monday 9th August – Friday 13th August
- Week 2: Monday 23rd – Friday 27th August
- Week 3: Monday 30th August – Friday 4th September
- Week 4: Monday 13th – Friday 17th September
- JC Presentation: Tuesday 21st September

* Food safety and product development week 1-3 occurs during inter trimester break

* Lab safety inductions will need to be completed by each student prior to commencing work in the labs.

Meet our experts

Meet our dedicated academic experts who will be teaching and mentoring you throughout the CASS-Academy experience.



Stream 1, rotation 1
Quantitative Descriptive Analysis (QDA)
Professor Russell Keast

Students will be given the opportunity to apply a common sensory methodology known as Quantitative Descriptive Analysis (QDA) to a real world sensory scenario. Students will learn what is entailed in developing a trained panel and have the opportunity to assist as a researcher in a current CASS food-industry related project. This rotation will also focus on analysing and summarising the data collected.



Stream 2, rotation 1
Flavour analysis
Associate Professor Robert Shellie

Students will learn how to analyse natural flavour compounds using modern laboratory instrumentation. Extracts from botanical extracts are among the best natural flavours but these extracts are often very complex mixtures containing >> 100 natural compounds. Students will use gas chromatography, mass spectrometry, and olfactometry (using their nose as a detector) to unravel complex botanical extracts.



Stream 1, rotation 2
Consumer Science
Associate professor Prof Gie Liem

By conducting their own real-world experiment with food consumers, students will have the opportunity to explore what influences our food choices and food behaviours and gain insights into some of the ways in which we are able to understand and influence food behaviours.



Stream 2, rotation 2
Food Safety
Dr Snehal Jadhav

Food waste due to microbial spoilage is a major threat to having a sustainable food system. The food industry in Australia is extremely stringent about maintaining Quality Control measures throughout the production line to limit or control the presence of spoilage microbes in foods. To reduce microbial spoilage, it is important to understand how various physical and environmental factors can affect microbial growth in different foods. In this rotation students will be using common food microbiology techniques to investigate the effect of temperature on milk storage.

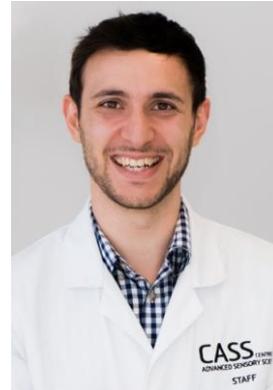
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Stream 3, rotation 1
Sustainability
Dr Georgie Russell

What and how we eat, as food consumers, has important effects on the environment. Students will undertake applied research with consumers to understand sustainable food behaviours and their determinants.



Stream 1, 2, 3, Rotation 3
Data analysis
Dr Andrew Costanzo

Students will learn how to analyse sensory data using data from a CASS research study investigating multiple sensory evaluation approaches. The correct approach to data handling, entry, cleaning and analysis will also be covered. Students will gain an understanding of the different elements required to obtain publishable sensory data.



Stream 3, rotation 2
Product development
Dr Shirani Gamlath

Students will gain knowledge and skills in designing a product concept for developing a plant-based protein product. In this rotation, students will research Mintel New Global Products Database and the Australian market to analyse the trends in plant-based protein products, their characteristics, type of ingredients and processing methods. Students will use the data to create a product brief to design a successful product.



CASS-Academy coordinator
Simi Lewin

Simi will assist both students and experts in the coordination of the elite CASS-Academy program. She will be there to answer any questions you have and ensure a smooth flow of each rotation while ensuring you, as the student achieve the maximum benefits of the program.

A few words from our CASS-Academy graduates

Clinton M—CASS Academy Graduate 2016

“Completing CASS Academy has helped me realise what I wanted to do. Before I wasn’t sure on my career and didn’t even know about the field of sensory science. Due to the unique learning opportunities within CASS Academy it has set me on a path that I really enjoy. I have been able to help in conducting research, recruiting participants and networking with industry professionals. It has also helped me go down the path of Honours and have now started my PhD to pursue my research career.”

Anonymous—CASS-Academy graduate 2018

“The CASS-Academy program has been a highlight of my food science degree and has exposed me to so much extra industry experience that is so valuable to have after graduating. All three rotations were unique and engaging and always felt like a positive addition to my workload, never overwhelming. I would highly recommend the CASS-Academy program to future students.”

Bella H—CASS Academy Graduate 2016

“At the start of my third year of the Food Science and Nutrition degree I was at a loss as to what I wanted to do when I finished. I decided to apply for the CASS academy and through this I gained invaluable experience in many different areas within sensory science. This even included a weekend trip away to conduct in field testing on iced coffee!

Being a student in the CASS academy not only gave me the opportunity to gain employment within the CASS laboratory, but also led me to complete an Honours year in Sensory Marketing, and now I have gone on to begin a PhD within CASS. If you are passionate about food, apply! “

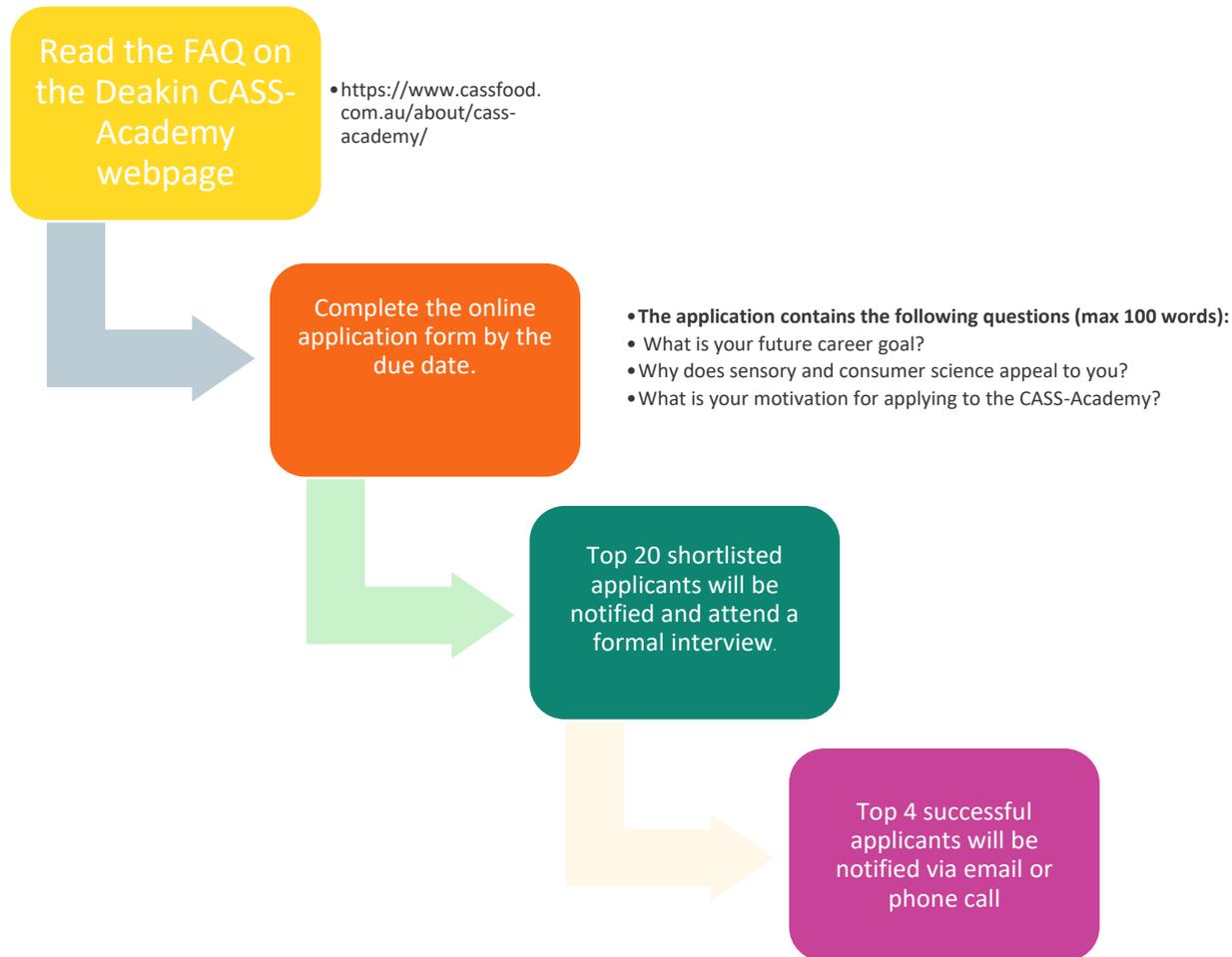
Lily H—CASS Academy Graduate 2017

“I initially applied for CASS Academy as it was a new area of food science I hadn’t explored in the first two years of my undergraduate. The program allowed me to work with leaders in research and create industry contacts!”

After completing CASS academy, I had new and exciting career opportunities which has lead me to my own Honours Project in Sensory Marketing!”

Application process

Successful applicants for CASS-Academy will be determined based on their overall demonstrated passion to further their study or career path into the areas of sensory, flavour, microbiology, product development, sustainability or consumer science.



Contact Us

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cassfood.com.au

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