COGS3999 is the PACE unit for the Cognitive and Brain Sciences degree. In this unit, students will apply and integrate the knowledge and skills they have acquired while completing their degree. This unit is designed to help students think carefully about their future career path whether in research, industry, or beyond.

**WHAT IS PACE IN COGS3999?**

PACE in COGS3999 is a 32 hour placement with a relevant local or regional organisation. This placement will provide students with a unique opportunity to put their cognitive science education to work in the real world. In this unit, students will consolidate acquired knowledge and practical skills; and deepen their understanding of cognitive science, especially the connections between the various disciplines of cognitive science and their impact on modern society.

**STUDENT SKILLS**

- Project planning and management;
- Self-reflection and critical thinking skills;
- Career planning skills;
- Scientific communication skills (written, oral, interpersonal, professional presentations);
- Translation of research into practice.

"Studying cognitive science helped me to develop useful skills in writing, statistics, and scientific and critical thinking. My studies also helped me to develop my "soft skills", which have been absolutely crucial for my work in mental health system reform".

DR JONATHAN MCGUIRE, PHD
SENIOR DATA ANALYST
MENTAL HEALTH COMMISSION OF NSW

"I found that those two skill sets, how we experience things [from Philosophy] and how other people experience things [ethnography from Anthropology], set me up really well for writing stories in sports media".

DR KATH BICKNELL, PHD
WRITER, RESEARCHER, & MEDIA PRODUCER

Macquarie University, Department of Cognitive Science
STUDENT OUTCOMES

- Develop key workplace skills that will help maximise the student’s contribution to their field of work and build a positive workplace experience;
- Investigate and compare the diverse career options where an understanding of cognitive science is essential, valuable, or advantageous;
- Critically reflect on core knowledge and key skills gained throughout their program of study for the purpose of appreciating the value of these skills in their future profession;
- Consolidate practical transition skills, including effective communication and critical thinking skills, to clearly communicate their long-term life and career goals, evaluate current position and identify strategies to complete their goals;
- Integrate and apply core theoretical knowledge, concepts, and key skills, including effective communication and interpersonal skills, gained throughout their program of study to complete an educational team presentation of Cognitive Science to a variety of audiences (e.g., primary school children, CEOs);
- Demonstrate an awareness of applied ethical and cultural conduct in all aspects of professional and research activities.

DESCRIPTION OF ACTIVITY

The types of activities that students undertake during placement are varied and very flexible but must relate to cognitive science. There are generally two types of placement activities:

- Taking part in the day-to-day activities of the organisation, or
- Working on a specific pre-defined project.

EXAMPLES OF ACTIVITIES

- Conducting experimental investigations with researchers;
- Summarising and presenting data for specialised audiences (e.g., medical departments, community groups);
- Conducting a systematic review of best practices for reading interventions;
- Researching a topic area or specific research finding in preparation for an online media release;
- Exploring big data to extract trends and communicate key concepts to stakeholders.
- Piloting the latest developments in technology to better understand and enhance the user experience;
- Developing resources to educate the public about health and wellbeing, for example, helping school children understand the consequences of concussion and the importance of wearing a helmet;
- Shadowing radio or television journalists in the research and development of media stories;
- Forecasting the impact of policy changes for the Department of Education;
- Receiving training in applied behaviour approaches as therapy for autism;
- Conducting interviews and qualitative analysis to report on extreme human experiences (e.g., elite athletes).

“As we move into the tech era, the line between human and machines is being increasingly blurred with the introduction of high-tech brain computer interfaces and also artificial intelligence. So it's become evident that our understanding of the brain has become even more important.”

LEONE CHARE
RESEARCH AND MARKETING ASSOCIATE
EMOTIV

“PACE in COGS3999 is critically important for our students. It helps them consolidate their knowledge in cognitive and brain sciences and learn to apply it to a range of real world domains”.

DR DAVID KAPLAN, PHD
DIRECTOR OF LEARNING AND TEACHING
DEPARTMENT OF COGNITIVE SCIENCE