

# FOUNDATIONS OF ROBOTIC SURGERY



Our foundations course will introduce you to the fundamental theory and principles of robotic surgery to prepare you for safe robotic surgical practice.



Accessible robotics training



Designed by surgeons,  
for surgeons



Future proof your career

Register online today: [courses.amraaus.org.au](https://courses.amraaus.org.au)

## Who is this course for?

Recommended for all doctors who are commencing robotic surgery practice including surgeons, trainees, surgical assistants and residents. If you have an interest in robotic surgery, or if you don't want to be left behind in your training, this course is for you.

## Who will I learn from?

Gain exclusive insight and instruction from our faculty of expert robotic surgeons as well as world class aviation and medical simulation educators. You will learn from real-world accomplished surgeons and experts.

## What will I learn?

You will be introduced to the theory and principles of robotic surgery in preparation for safe robotic surgical practice. Over the course of 11 learning modules, you will fully understand the foundational principles of robotic surgery including: the history, robot and console setup, the fundamentals of operating, achieving robotic surgical competency and much more.



### The benefits

- ✓ Fully online for ease of completion
- ✓ 10-15 hours of self paced learning to complete in your own time
- ✓ Designed by surgeons for surgeons
- ✓ Content delivered by experts in simulation, high fidelity synthetic models and robotic surgery
- ✓ Gain confidence to take on new opportunities

“

*I felt really underprepared for my first robotics case. I discovered AMRA through a colleague. I completed the online Foundations of Robotic Surgery and learned so much about how to safely practice robotics. This was training delivered by surgeons. I was a lot more confident for my next case.*

” Urology Registrar

“

*Excellent. Engaging and high quality, very user friendly and very professional. A great introduction to robotics.*

” Gynecology & Obstetrics Registrar

## OUR CURRICULUM CONTENT

### MODULE 1: ORIENTATION

Hear from the founder and our faculty of experts on why AMRA was formed and our vision for robotic education. Introduction to the AMRA Education Method including robotic vendor training, Virtual Reality and 3D technology in robotic surgery.

### MODULE 2: INTRODUCTION

Understand the history of surgical robotics in Australia and internationally, key technological features, advantages, and the projected robotic systems expected to enter the healthcare system in the next few years.

### MODULE 3: ROBOT SETUP

Meet the da Vinci Xi surgical robot. Watch instructional videos on port handling, robot docking and instrument insertion.

### MODULE 4: ANAESTHETIC FOR ROBOTIC SURGERY

Learn about perioperative and anaesthetic considerations for robotic surgery including patient position and physiology.

### MODULE 5: CONSOLE SETUP

Familiarise yourself with the da Vinci Xi surgical console and watch instructional videos on ergonomics and instrument handling.

### MODULE 6: FUNDAMENTALS OF OPERATING

Learn about basic robotic instruments: how they work, how they are different to laparoscopic instruments, what tissues they should be used for, and when to use them. You will also be introduced to basic robotic skills, such as suturing, knot tying, and how to dissect tissue and create planes.

### MODULE 7: ASSISTING IN ROBOTIC SURGERY

Most robotic surgeons begin their training at the bedside where they develop their laparoscopic skills, gain anatomical knowledge and learn the steps of procedures. Understanding the mechanics and "buttonology" of robotic surgical machines is a key component of becoming a robotic surgeon.

### MODULE 8: ACHIEVING ROBOTIC SURGICAL COMPETENCY

Hear from respected simulation training experts from around the world and delve into shadow learning, Virtual Reality simulation, Artificial Intelligence, synthetic organ models and new metrics.

### MODULE 9: NON-TECHNICAL SKILLS FOR ROBOTICS

Understand the parallels between robotic surgery and aviation training in regards to human factors and non-technical skills. Gain critical skills and take on learning from the aviation area that you can apply to safe robotic surgery.

### MODULE 10: VENDOR TRAINING

In our AMRA facility, we will house different robots from different vendors. This module will help you navigate through the relevant online learning material to prepare you prior to visiting the laboratory.

### MODULE 11: PREPARATION FOR BASIC SIMULATIONS SKILLS COURSE

We'll give you the preparation you need prior to undertaking the Basic Simulation Skills course.

“

*Content relevant, practical and in depth, unlike the robotic education you get anywhere else. I liked that it was being taught by expert surgeons.*

” Surgical Registrar



## Our Mission

Together we can work towards a future with reduced surgical complications, accelerated patient recovery, and lower overall costs for the healthcare system.



**PROF. TONY COSTELLO**  
CEO & DIRECTOR



**ASSOC. PROF. AHMED GHAZI**  
SYNTHETIC ORGANS



**DR PHIL DUNDEE**  
ROBOTIC SURGEON



**DR RAJESH NAIR**  
ROBOTIC SURGEON



**CAPTAIN MATTHEW GRAY**  
SIMULATION



**DR JUSTIN PETERS**  
ROBOTIC SURGEON



**DR JOHN LENIHAN**  
SIMULATION



**DR SAM COSTELLO**  
ANESTHETIST



**ASSOC PROF CAROLINE DOWLING**  
ROBOTIC SURGEON

Visit our website to view our entire faculty of experts.

Register online today: [courses.amraaus.org.au](https://courses.amraaus.org.au)