



# AACES Critical Care & Emergency Procedure Course

## Course Description

Specifically designed for healthcare providers who are exploring point of care ultrasound to enhance the safety and effectiveness of their procedural skills. This course covers the spectrum of ultrasound guided procedures and interventions commonly performed in the intensive care units, high dependency units and emergency department.

Lectures are succinct and delivered in an interactive format. The **Hands-on Training** is the cornerstone of the program. During these sessions, trainees will be guided to perform ultrasound guided interventional skills on phantoms and mannequins. With more than 4hrs set aside for the practical and keeping the trainer to trainee ratio at maximum of **1:4**, participants will have ample opportunities to practise. This course will lay the foundation required of the healthcare provider in performing ultrasound guided critical care and emergency procedures.

## Learning Objective

Upon completion of the Acute and Critical Care Session, participants will learn how to use ultrasound to:

- Perform cricothyrotomy, endotracheal intubation, predict difficulty of laryngoscopy
- Evaluate prandial status, confirm placement of nasogastric tube
- Perform pericardiocentesis
- Perform central venous catheterization of the internal jugular, subclavian and femoral vein
- Perform peripheral venous and arterial catheterization
- Perform thoracocentesis, paracentesis and suprapubic bladder aspiration
- Perform lumbar puncture

Upon completion of the Soft Tissue and Nerve Block Session, participants will learn how to use ultrasound to:

- Perform femoral plane block (fascia iliaca-femoral nerve)
- Perform truncal nerve block (erector spinae plane block / intercostal block)
- Perform joint aspiration of the ankle, knee, hip, elbow and shoulder
- Detect and remove foreign bodies
- Confirmation of joint enlocation (shoulder) and assessing adequacy of fracture reduction

## Who should attend?

Critical care physicians, emergency physicians, physicians, surgeons, anaesthetist, residents, medical officers and healthcare workers who are required to perform these procedures in their practice. Participants should already have a basic understanding and appreciation of point of care ultrasound and ultrasound physics.

## ACGME-I Competencies

This course is designed to meet one or more of the following ACGME competencies:

- Patient Care
- Medical Knowledge
- Practice-Based Learning and Improvement

## Course Programme

0800	<b>Registration &amp; Welcome</b>	1310	<b>C06 Femoral Plane Block</b>
0810	<b>C01 Basis of Ultrasound Guidance</b>	1325	<b>C07 Truncal Plane Block</b>
0830	<b>C02 Central Vascular Access</b>	1345	<b>C08 Lumbar Puncture</b>
0850	<b>C03 Airway &amp; Tube</b>	1400	<b>C09 Manipulation and Reduction</b>
0910	<b>C04 Truncal Tap</b>	1410	<b>C10 Foreign Body</b>
0930	<b>C05 Pericardiocentesis</b>	1425	<b>C11 Arthrocentesis</b>
1000	<b><u>Break</u></b>	1440	<b>Hands-on Training 2 (1<sup>st</sup> Rotation)</b>
1020	<b>Hands-on Training 1</b>	1540	<b><u>Break</u></b>
1230	<b><u>Lunch</u></b>	1600	<b>Hands-on Training 2 (Continue..)</b>
		1700	<b>Admin &amp; Course Closure</b>

### **AACES Online Lectures**

#### **Physics, Knobs and Probes**

Essentials of image formation, acquisition and optimization and probe manipulation techniques.  
Common Artefacts

*Online lectures will be made available 2 weeks prior to course date. Please review these AACES Online Lectures before the course.*

### **Admin**

Course material, meals and parking coupons will be provided.

**Venue:** Khoo Teck Puat Hospital, 90 Yishun Central, S768828.

**Website:** Visit [www.AACES.sg](http://www.AACES.sg) to learn more about AACES and other educational resources.