



# AACES BASIC Course

An Introduction to Point of Care Ultrasound

## Course Description

A predominantly hands-on program specifically designed for healthcare providers who are new to point of care ultrasound. The **BASIC (Basic Sonography Integrated Care)** course covers six of the most common diagnostic and procedural-based ultrasound applications in the general ward and emergency setting.

In the diagnostic section, participants will learn how to evaluate for free intraperitoneal-pericardial fluid, pneumothorax (E-FAST) and abdominal aortic aneurysm (AAA). In the procedural section, participants will learn how to use ultrasound to confirm placement of nasogastric tube and urinary catheterization, calculate residual bladder volume and guide peripheral intravenous cannulation in patients with difficult vascular access.

Lectures are delivered in a concise format. The **Hands-on Training** is the cornerstone of the program. Participants will learn how to perform the diagnostic scans on volunteers and practise ultrasound-guided interventions on mannequins. Attention will be given to maximizing the diagnostic yield for novices. Free stations are included to allow participants to individualize their learning experience and practice on applications of their choice. With a trainer to trainee ratio kept at a maximum of **1:4**, participants will have ample opportunities to practise during the hands-on training.

## Learning objectives

Upon completion of this course, participants will learn how to use ultrasound to:

- Evaluate for free intraperitoneal-pericardial fluid
- Evaluate for pneumothorax
- Evaluate for abdominal aortic aneurysm
- Perform peripheral intravenous cannulation
- Confirm placement of urinary catheter and perform bladder volume calculation
- Confirm placement of nasogastric tube

## Who should attend

**Nurses** and **doctors** in internal medicine, critical care medicine, emergency medicine, military medicine, community medicine, surgery, trauma and anaesthesia; and **paramedic**. No prior experience with point of care ultrasound is required.

## ACGME-I Competencies

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

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

# Course Programme

0800	<b>Registration &amp; Welcome</b>
0810	<b>Diagnostic Applications:</b> Indications, scanning tips and pitfalls <ul style="list-style-type: none"><li>• Evaluation for pneumothorax and free intraperitoneal-pericardial fluid (E-FAST)</li><li>• Evaluation for abdominal aortic aneurysm</li></ul>
0840	<b>Hands-on Training 1</b>
1000	<b><u>Break</u></b>
1020	<b>Procedural Applications:</b> Indications, scanning tips and pitfalls <ul style="list-style-type: none"><li>• US guided nasogastric tube and urinary catheter placement, bladder volume measurement</li><li>• <i>Peripheral venous cannulation*</i></li></ul>
1040	<b>Hands-on Training 2</b>
1200	<b>Hands-on Training 3</b> (free stations)
1230	<b>Admin &amp; Course Closure</b>

## **AACES Online Lectures**

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

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

### **Circulation: Arterial**

- Standard abdominal aortic windows. Assessment and identification of abdominal aortic aneurysm.  
Pathology: AAA. Pitfalls

### **Vascular Access: peripheral**

- Approach to vascular access. Peripheral venous and arterial access

*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.