This highly practical programme will bring together ultrasonography, radiology and CT/MRI in a series of interactive modules.

The fundamental principles of all the imaging modalities including their applications will be covered in detail. Case based material will feature strongly throughout the programme. The modules will assist you in consolidating your knowledge of the key imaging modalities and in choosing the most clinically appropriate diagnostic method.

Get the most out of this programme and your CPD

<table>
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<tr>
<th>Achieve a</th>
<th>Achieve a</th>
<th>Apply for</th>
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<tbody>
<tr>
<td>General Practitioner Certificate (GPCert)</td>
<td>Postgraduate Certificate (PgC)</td>
<td>Advanced Practitioner Status</td>
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- Complete the full one year programme (all modules) and achieve the GPCert and attain 40 academic credits at Masters Level 7.
- Continue to a PgC (60 academic credits), which combines the GPCert clinical studies with reflective practice.
- After completing your Postgraduate Certificate you can apply for the RCVS Advanced Practitioner Status.

The Advanced Practitioner Module is 20 academic credits at Masters Level 7 and delivered by Harper Adams University.

Subject to meeting all of the other entry requirements set out by RCVS in the Applicant Guidance Notes.
Taught Modules

01: 12.01.17
Ultrasonography I: introduction to diagnostic imaging modalities*
Speaker: Tim Trevail
(BVetMed CertVDI DipECVDI MRCVS)

- Understand the basis of radiographic interpretation
- Explain the principles, strengths, limitations and principles of CT
- Explain the principles, strengths, limitations and principles of MRI
- Appreciate the requirements for radiation protection in the workplace including knowledge of the Ionising Radiation Regulations
- Select appropriate contrast agents

02: 13.01.17
Ultrasonography II: introduction to diagnostic imaging modalities*
Speaker: Tim Trevail

- Perform ultrasonography of the reproductive tract and urinary tract
- Obtain standard echocardiographic views
- Obtain the useful ultrasonographic measurements needed to make diagnoses

03: 30.03.17
Radiography, CT & MRI: introduction to diagnostic imaging modalities
Speaker: Tom Maddox
(BVSc PhD CertVDI DipECVDI MRCVS)

- Explain the principles of conventional and digital radiography
- Evaluate and improve image quality

04: 31.03.17
Abdominal radiology and CT†
Speaker: Tom Maddox

- Recognise the normal radiographic appearance of the abdomen
- Interpret radiological changes associated with diseases of the abdominal wall, peritoneal cavity, retroperitoneal space, liver, spleen, pancreas, adrenal glands, lymph nodes, urogenital and gastrointestinal systems
- Understand the value of contrast studies in the evaluation of the urogenital and gastrointestinal systems
- View CT images demonstrating the normal appearance of the abdomen
- Understand when to choose CT as a diagnostic modality in abdominal conditions

05: 15.05.17
Abdominal ultrasonography day one*
Speaker: Abby Caine
(MA VetMB CertVDI Dip ECVDI MRCVS)

- Set up the machine and record images
- Recognise commonly seen artefacts
- Recognise the normal anatomy and ultrasonographic appearance of the abdomen
- Appreciate the ultrasonographic changes and common diseases of the abdominal wall, peritoneal cavity, retroperitoneal space, liver and spleen

06: 16.05.17
Abdominal ultrasonography day two*
Speaker: Abby Caine

- Appreciate the ultrasonographic changes and common diseases of the pancreas, adrenal glands, lymph nodes, urogenital and gastrointestinal systems
- Perform elementary Doppler techniques
- Perform ultrasound guided biopsy and aspiration

* Module includes practical scanning session. † This module includes a film reading session and case discussion. ‡ This module includes a film reading session.
Thoracic radiology I†
Speaker: Kate Bradley
(MA VetMB PhD DVR DipECVDI MRCVS)

• Utilise appropriate radiographic techniques in the thorax
• Recognise the normal radiographic appearance of the thoracic wall, pleural cavity, diaphragm and mediastinum
• Interpret radiological changes associated with diseases of the thoracic wall, diaphragm, pleural space and mediastinum
• Have the knowledge to perform and interpret contrast studies of the oesophagus

Thoracic radiology II†
Speaker: Kate Bradley

• Utilise appropriate radiographic techniques in the thorax to obtain diagnostic radiographs of the heart, lungs and vasculature
• Recognise the normal radiographic appearance of the heart, lungs and vasculature
• Interpret radiological changes associated with disease of the heart, lungs and thoracic vasculature
• Understand when to choose CT as a diagnostic modality in thoracic conditions

Echocardiography I*
Speaker: Joao Loureiro
(DVM CertVC DipECVIM-CA MRCVS)

• Recognise the normal anatomy and ultrasonographic appearance of the heart
• Perform an echocardiographic examination
• Obtain the standard echocardiographic views and know how to optimise them
• Obtain the useful ultrasonographic measurements needed to make a diagnosis

Echocardiography II*
Speaker: Joao Loureiro

• Identify the typical changes seen in common acquired cardiac diseases such as diseases of the myocardium, pericardium and heart valves
• Identify the typical changes seen in common congenital cardiac diseases such as diseases of the myocardium, pericardium and heart valves
• Recognise cardiac shunts
• The theory and use of Doppler echocardiography

* Module includes practical scanning session. † This module includes a film reading session and case discussion. ‡ This module includes a film reading session.
Taught Modules

11: 02.11.17
Radiology and CT of the skeletal system
Speaker: Virginie Barberet
(DVM Dipl.ECVDM PhD MRCVS)

- Recognise the normal radiographic appearance of the forelimb and hindlimb and identify changes associated with common diseases
- Classify fractures and interpret stages of fracture healing and complications
- Discuss the radiographic signs and differentiation of infection and neoplasia
- Diagnose various metabolic and nutritional bone diseases
- Perform arthrography
- View CT images demonstrating the normal appearance of the skeletal system and understand when to choose CT as a diagnostic modality in musculoskeletal conditions

12: 03.11.17
Radiology, CT and MRI of the head and vertebral column
Speaker: Virginie Barberet

- Recognise the normal radiographic appearance and radiographic changes associated with diseases of the head and soft tissues of the neck (thyroid glands and lymph nodes)
- Recognise the normal radiographic appearance of the spine and radiographic changes associated with common diseases of the spine
- Have an understanding of the use of myelography and CT myelography
- Have an understanding of the utilisation of CT and MRI in clinical neurology
- Make informed choices in selecting CT or MRI and when to refer cases for these investigative procedures
- Interpret ultrasonographic changes associated with diseases of the thyroid gland, lymph nodes and salivary glands
- Understand the applications of ultrasound in examining the eye

13: 07.12.17
Thoracic ultrasonography (except heart)
Speaker: Tim Trevail

- Recognise the normal anatomy and ultrasonographic appearance of the thorax excluding the heart
- Recognise the ultrasonographic changes and common diseases of the mediastinum, pleural space and lungs
- Understand the approach to ultrasound guided biopsy and aspiration techniques
- Review echocardiography and practise obtaining the standard views and measurements

14: 08.12.17
Ultrasonography of the skeletal system, head and neck ultrasonography
Speaker: Tim Trevail

- Recognise the normal appearance and deviations of muscles and tendons. Practical identification and examination of the biceps tendon and common calcaneal tendon
- Recognise the normal anatomy

* Module includes practical scanning session. † This module includes a film reading session and case discussion. ‡ This module includes a film reading session.
### Payment terms & conditions

1. A non-refundable initial payment of £924.00 is due on registration in order to secure the booking. Deposits can be paid by cheque, credit card or bank transfer.

2. Full payment to be made by BACS, credit card or cheque within 30 days of the deposit payment in order to be eligible for the discounted rate.

3. Direct debit plans are administered and collected on our behalf by Animal Healthcare Limited.

4. Multiple booking discounts available, please contact us on 01793 759159 for further information.

5. If paying by direct debit we must receive the first payment prior to the course commencing.

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### Pricing for 2017

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<tr>
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For those individuals continuing to PgC, the tuition fee for the Advanced Practitioner Module is £1,250 payable to Harper Adams University.