



**Lifting Equipment
Engineers Association**

**PRACTICAL TRAINING COURSES
January to June 2012**

Document reference LEEA 036 dated 8th November 2011

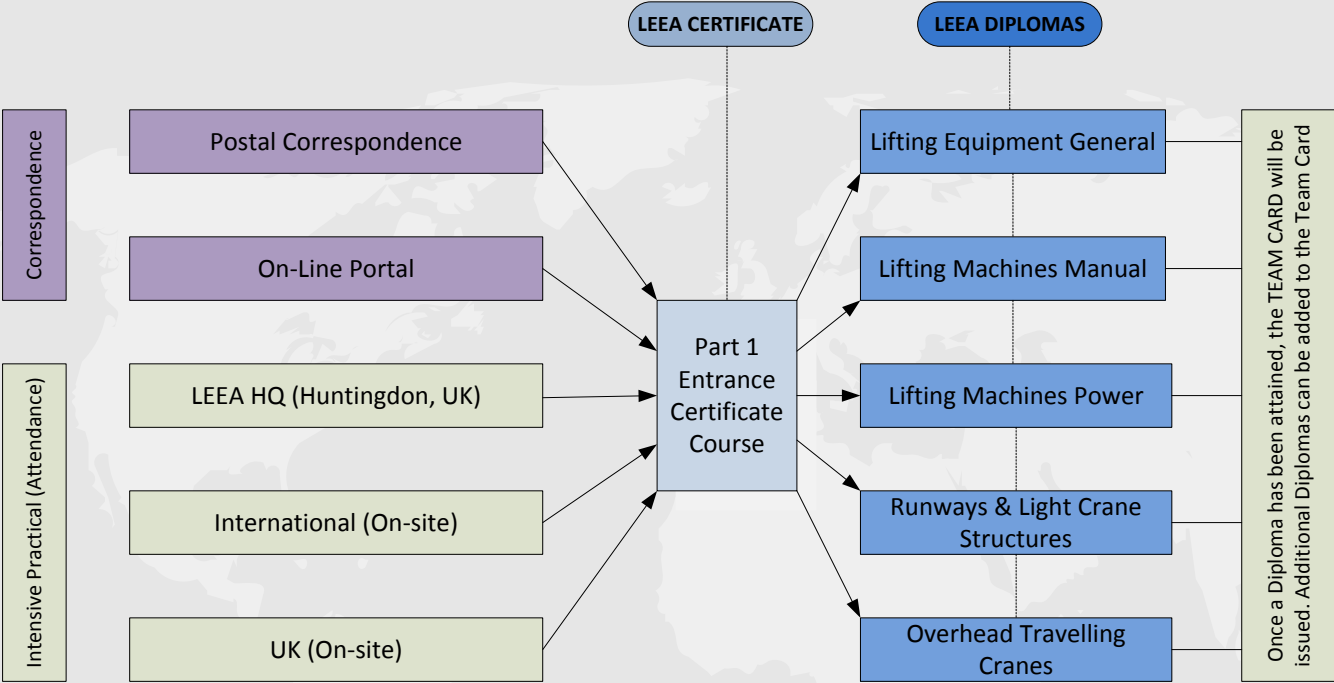
~~~~~

Published by the  
**LIFTING EQUIPMENT ENGINEERS ASSOCIATION**  
3, Osprey Court, Kingfisher Way,  
Hinchingsbrooke Business Park, Huntingdon PE29 6FN  
United Kingdom  
Tel: + 44 (0) 1480 432801 Fax: + 44 (0) 1480 436314  
E-mail: mail@leea.co.uk



[www.leeaint.com](http://www.leeaint.com)

# LEEA TRAINING MATRIX



Once a Diploma has been attained, the TEAM CARD will be issued. Additional Diplomas can be added to the Team Card

Test & Examine Qualifications

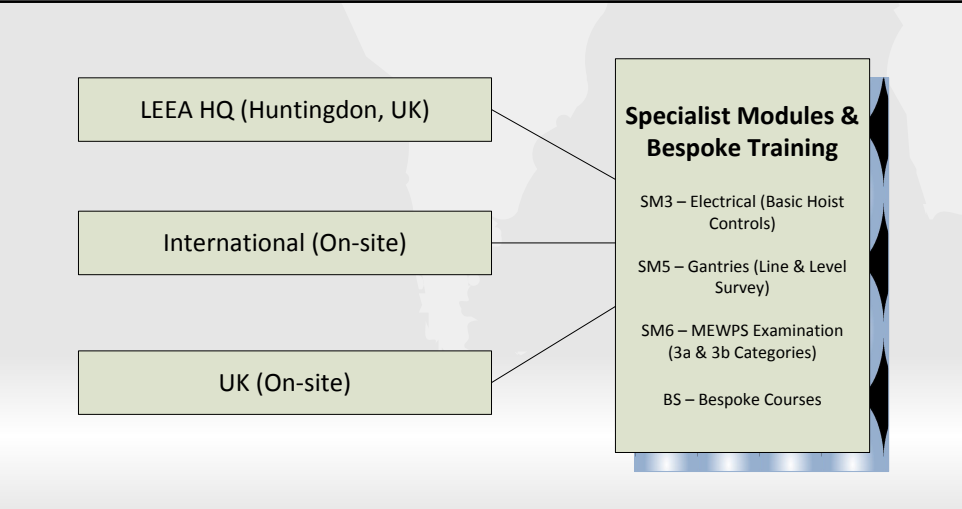


Not available to Individual Trainees

**New for 2012....**

- Diploma Endorsements**
1. LEGE
  2. LMME
  3. LMPE
  4. RLCSE
  5. OTCE

Test, Examine & *Theoretical Checking* Qualifications – Categories added to Team Card



## LEEA TRAINING MATRIX EXPLAINED

### LEEA Certificates, Diplomas and Team Cards

**The Part 1 Entrance Certificate** is a prerequisite training course that must be achieved before progressing to LEEA Diploma level qualifications. The Part 1 Entrance Certificate is NOT a qualification.

**The LEEA Diploma** is a qualification in your chosen subject. The Diplomas can be taken in any order and each Diploma that is achieved will include the issue of a Team Card in the qualification category of “Test & Examine”. Additional Diplomas attained will be added to your Team Card qualification listing on the reverse of the card.

**Specialist Module** and **Bespoke** training courses are designed as supplementary training courses that compliment the Diploma qualifications. The LEEA currently have two Specialist Modules available with a further two courses scheduled for roll out in 2011. Delegates that successfully complete the training courses will be awarded a LEEA Certificate.

### NEW FOR 2012

**Diploma Endorsement** training courses will commence in 2012. The courses will provide advanced training for those wishing to achieve endorsements to their existing Diploma qualifications. Each endorsement training course will include a final written examination. Successful delegates will receive an LEEA Diploma Endorsement award and the further qualification category of “Theoretical Checking” will be added to the corresponding Diploma on their Team Card.

**The “Gold” Team Card** will be issued to individuals that have achieved the minimum standard of 2 Diploma Endorsements, one of which must be the Lifting Equipment General Endorsement.



**LEEA GOLD TEAM CARD**

## Methods of Training

**Distance Learning** options are available for the Part 1 Entrance Certificate and Diplomas (excluding Overhead Travelling Cranes). There are two options available:

1) Postal Correspondence **(CC)**

Or

2) On-Line via the LEEA Training Portal **(OL)**

**(IP) Intensive Practical (attendance)** courses can be delivered internationally at the member's premises, or at our purpose built Training Centre at LEEA Huntingdon offices. These include Part 1 Entrance Certificate, Bespoke Training and Diplomas (excluding Overhead Travelling Cranes).

**(SM) Specialist Module** training courses are usually carried out at the LEEA Training Centre in Huntingdon, UK as they involve practical elements of training with specialist tools and equipment.

**(BS) Bespoke Courses** - We will be pleased to consider any requests for special courses to suit a member's particular needs. Also if a member wishes to book all places on a course exclusively for their employees, the content can be varied to suit their requirements, including off-hire inspection of slings, manually operated lifting machines and lifting accessories.



## **IP1 - The Part 1 Entrance Certificate**



The Part 1 Entrance Certificate is the basic level training course offered by the LEEA. It is a prerequisite for studying at Diploma level. The course does not include visual inspection criteria.

### **Course Syllabus:**

|      |                                         |      |                             |
|------|-----------------------------------------|------|-----------------------------|
| 1.1  | The Law                                 | 1.11 | Components                  |
| 1.2  | Standards and Codes of Practice         | 1.12 | Chain Slings                |
| 1.3  | Materials                               | 1.13 | Wire Rope Slings            |
| 1.4  | Methods of Manufacture                  | 1.14 | Shackles                    |
| 1.5  | Stress and Strain in Lifting Equipment  | 1.15 | Eyebolts                    |
| 1.6  | Destructive and Non-Destructive Testing | 1.16 | Revision assignment         |
| 1.7  | Verification of Lifting Equipment       | 1.17 | Textile Slings              |
| 1.8  | Chains for Lifting Purposes             | 1.18 | Mechanics - Simple Machines |
| 1.9  | Wire Rope Construction                  | 1.19 | Revision Assignment         |
| 1.10 | Revision Assignment                     | 1.20 | Revision Assignment         |



The course is a 2-day course, structured to take place over 3 days in order to allow for delegate travelling time on the morning of day 1 and the afternoon of day 3 (with a final examination for the Certificate on day 3) ***Please see course times below the table of scheduled courses below.***

**This foundation course does not offer a LEEA qualification for inspection or examination of lifting equipment but must be completed before a delegate can undertake the Diploma or Specialist Module courses.**

**Current availability:** On-Line (OL), Correspondence (CC), Intensive Practical (IP – UK on-site, Huntingdon HQ and Overseas)

Delegates will benefit from hands-on practical training to complement the essential theory sessions. The Diploma is based on lifting accessories and includes thorough examination procedures and criteria for continued periods of service.

**Course Syllabus:**

- |      |                                             |      |                                |
|------|---------------------------------------------|------|--------------------------------|
| 2.1  | The Law                                     | 2.11 | Eyebolts                       |
| 2.2  | Stress and Strain in Lifting Equipment      | 2.12 | Shackles                       |
| 2.3  | Heat Treatment                              | 2.13 | Chain Slings                   |
| 2.4  | Vectors and Forces                          | 2.14 | Wire Rope Slings               |
| 2.5  | Rating of Lifting Gear for General Purposes | 2.15 | Textile Slings                 |
| 2.6  | Verification of Lifting Gear                | 2.16 | Practical Assignment           |
| 2.7  | Chain for Lifting Purposes                  | 2.17 | Plate Clamps                   |
| 2.8  | Wire Rope                                   | 2.18 | Lifting Beams                  |
| 2.9  | Practical Assignment                        | 2.19 | Lifting Crane Forks and C-Hook |
| 2.10 | Components for Slings                       | 2.20 | Revision Assignment            |



The course is structured to take place over a 5-day period. UK and International on-site LEG Diploma courses will require certain accessories being available for practical sessions. These can be shipped by the LEEA at the request of the member company subject to carriage charges.

**Current availability:** On-Line (OL), Correspondence (CC), Intensive Practical (IP – UK on-site, Huntingdon HQ and Overseas)

Delegates will benefit from hands-on practical training to complement the essential theory sessions. The Diploma is based on manually operated lifting machines and includes thorough examination procedures and criteria for returning items to service.

### Course Syllabus:

|      |                                                              |      |                      |
|------|--------------------------------------------------------------|------|----------------------|
| 3.1  | The Law                                                      | 3.11 | Revision Assignment  |
| 3.2  | Verification of Lifting Equipment<br>(Testing & Examination) | 3.12 | Wire Rope            |
| 3.3  | Mechanics – Simple Machines                                  | 3.13 | Jaw Winches          |
| 3.4  | Pulley Blocks                                                | 3.14 | Winches              |
| 3.5  | Practical Assignment                                         | 3.15 | Practical Assignment |
| 3.6  | Chain for Lifting Machines                                   | 3.16 | Mechanical Jacks     |
| 3.7  | Screw Brake Mechanisms<br>(Chain & Lever Hoists)             | 3.17 | Hydraulic Jacks      |
| 3.8  | Hand Operated Chain Blocks                                   | 3.18 | Practical Assignment |
| 3.9  | Lever Hoists                                                 | 3.19 | Site Procedures      |
| 3.10 | Trolleys                                                     | 3.20 | Revision Assignment  |



The course is structured to take place over a 5-day period. UK and International on-site LMM Diploma courses will require certain accessories being available for practical sessions. These can be shipped by the LEEA at the request of the member company subject to carriage charges.

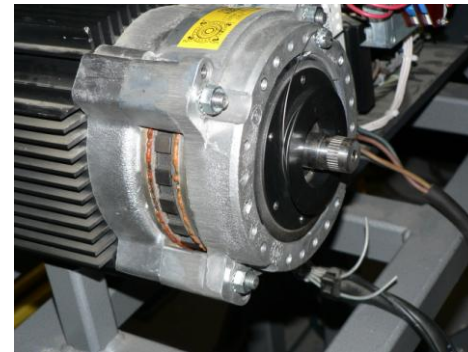
**Current availability:** On-Line (OL), Correspondence (CC), Intensive Practical (IP – UK on-site, Huntingdon HQ and Overseas)

## IP4 - Lifting Machines Power Diploma

Delegates will benefit from hands-on practical training to complement the essential theory sessions. The Diploma is based on powered lifting machines and includes thorough examination procedures and criteria for returning items to service.

### Course Syllabus:

|      |                                        |      |                                  |
|------|----------------------------------------|------|----------------------------------|
| 4.1  | The Law                                | 4.11 | Brakes (Sliding Rotor Principle) |
| 4.2  | Standards and Codes of Practice        | 4.12 | Disc Brakes (Disk Type)          |
| 4.3  | Examination and Testing Procedures     | 4.13 | Electric Hoist Motors            |
| 4.4  | Accessories (1)                        | 4.14 | Pneumatic Hoists (1)             |
| 4.5  | Accessories (2)                        | 4.15 | Pneumatic Hoists (2)             |
| 4.6  | Travelling Trolleys                    | 4.16 | Hoist Construction               |
| 4.7  | Power Feed Systems                     | 4.17 | Reeving and Rope Guides          |
| 4.8  | Electrical Circuits in Power Hoists    | 4.18 | Chain Hoists                     |
| 4.9  | Limit Switches and Devices             | 4.19 | Revision Assignment              |
| 4.10 | Overload Devices for Electrical Hoists | 4.20 | Revision Assignment              |



The course is structured to take place over a 5-day period. UK and International on-site LMP Diploma courses will require certain accessories being available for practical sessions. These can be shipped by the LEEA at the request of the member company subject to carriage charges.

**Current availability:** On-Line (OL), Correspondence (CC), Intensive Practical (IP –Huntingdon HQ)

## **SM3 – Electrical (Basic Hoist Control)**

This 4 day course is for mechanically biased delegates with little or no knowledge of electricity or its application to powered chain and wire rope hoists. The course will cover basic electrical theory with an overview of typical hoist control components and standard fault diagnosis techniques. Delegates will follow practical elements of electrical maintenance checks and simple motor control configurations. Delegates will gain a general understanding of control and power circuits for simple lifting machines. Successful delegates will receive a LEEA Certificate.

### **Course Syllabus:**

- Understand the essential safety precautions necessary to work safely
- Understand the functionality of standard electrical components
- Basic AC motor theory
- Contactor control systems
- Overview of legislation & standards
- Risk Assessment/Lock-Out
- Test & measurement
- Motor control techniques
- Power supply systems
- Practical Workshop



**Current availability:** Intensive Practical (IP –Huntingdon HQ)

## **SM6 – MEWPs Examination (Self-propelled boom & scissor – categories 3a and 3b)**

This 3-day course is intended for candidates that already possess the LEEA Lifting Equipment General and Lifting Machines Power Diplomas. The course will provide theoretical and practical training in relation to the current regulations and the requirements of persons carrying out thorough examinations of powered access equipment.

Successful assessment provides suitable candidates with the valuable documentary evidence that they are certified as competent persons to plan, manage or carry out thorough examinations of platforms in the context of current legislation including the Work at Height Regulations, LOLER and PUWER 98.

### **Course Syllabus:**

|    |                                        |    |                  |
|----|----------------------------------------|----|------------------|
| 1  | The Law                                | 11 | Record Keeping   |
| 2  | Overview of Work at Height regulations | 12 | Definitions      |
| 3  | Standards and Codes of Practice        | 13 | LOLER Schedule 1 |
| 4  | Persons carrying out Examinations      |    |                  |
| 5  | Checks and Inspections                 |    |                  |
| 6  | Thorough Examination                   |    |                  |
| 7  | MEWPS not in Regular Use               |    |                  |
| 8  | Testing                                |    |                  |
| 9  | NDT Techniques                         |    |                  |
| 10 | Maintenance Requirements               |    |                  |



**Current availability:** Intensive Practical (IP –Huntingdon HQ)

See notes ❶ and ❷ below

# Huntingdon Training Timetable (January to June 2012)

| Code | Course Title                      | Course Length               | Jan                                    | Feb                                  | Mar               | Apr            | May   | Jun          | Price per delegate<br>*(excluding VAT) |
|------|-----------------------------------|-----------------------------|----------------------------------------|--------------------------------------|-------------------|----------------|-------|--------------|----------------------------------------|
| IP1  | Part 1 Entrance Examination       | 2 days training over 3 days | 4-6, 10-12, 17-19, 24-26, 30 Jan-1 Feb | 1-3, 7-9, 14-16, 21-23, 28 Feb-1 Mar | 7-9, 20-22, 27-29 | 3-5            | 29-31 | 6-8          | £345                                   |
| IP2  | Lifting Equipment General Diploma | 5 days                      | 23-27                                  | 13-17, 27 Feb-2 Mar                  | 12-16, 26-30      | NA             | 21-25 | 18-22, 25-29 | £645                                   |
| IP3  | Lifting Machines Manual Diploma   | 5 days                      | NA                                     | NA                                   | 19-23             | 16-20          | NA    | 11-15        | £645                                   |
| IP4  | Lifting Machines Power Diploma    | 5 days                      | NA                                     | 20-24                                | NA                | 30 Apr - 4 May | NA    | 18-22        | £645                                   |
| SM3  | Electrical (Basic Hoist Control)  | 4 days                      | NA                                     | NA                                   | NA                | NA             | NA    | 26-29        | £516                                   |
| SM6  | MEWPS Examination                 | 3 days                      | NA                                     | NA                                   | 5-7               | NA             | 1-3   | NA           | £553                                   |

**NA = not available**

**\*VAT (where applicable) will be charged at the prevailing rate at time of invoice.**

- The IP1 (Part 1 Entrance Certificate) course is held over three days: Day 1 : 1.30pm to 4.30pm, Day 2 : 9am to 4.30pm and Day 3 : 9am to 12.30pm.
- All other courses will commence at 9.00am and finish at 4.30pm (Monday to Thursday) and 9.00am to 3.45pm (Friday).
- Whenever possible we will endeavour to provide training on the preferred dates selected on the booking form. However places will be allocated on a first come basis. Please therefore indicate any acceptable alternative dates.
- Where overnight accommodation is required, members will be responsible for their own arrangements. There is a range of accommodation available within a short drive of the LEEA Training centre and we will be pleased to provide contact details.
- Morning and afternoon refreshments will be provided together with lunch where applicable.

### **Eligibility for the courses**

There is no age restriction for entry in a Part 1 Entrance Certificate. Any employee of a member company who is aged 18 or more is eligible to attend course SM3. There is no requirement to hold the Part 1 Entrance Certificate to enrol on the SM (Specialist Module) courses other than ❶ SM6 – MEWPS Examination, which requires the delegate to hold both Lifting Equipment General and Lifting Machines Power LEEA Diplomas. In addition, the delegate must hold a valid IPAF Operator’s Licence for Scissor Lift (SL) and Self Propelled Boom (SPB), categories 3a and 3b.

**Entrance to Diploma courses is restricted to those that hold the Part 1 Entrance Certificate.**

### **Clothing and PPE requirements**

The practical training courses all include a mixture of sessions in the classroom and workshop. Workshop sessions will involve handling used equipment. Delegates should therefore be cleanly dressed and bring a suitable overall for the practical sessions. Lockers are available for storage. Hand tools will be provided and it will be the responsibility of the delegate to ensure that all tools and equipment are returned to their respective location at the end of the practical sessions.

❷ Delegates attending the SM6 MEWPS Examination course must have their own safety harness, 1 metre restraint lanyard, hi-visibility jacket, toe protection footwear, overalls and safety helmet.

### **Terms and conditions**

#### **Credit**

Standard LEEA credit terms apply.

#### **Cancellations**

The following cancellation charges apply:

Cancellation within 7 days of the commencement of the course = 50% of the course fee.

Cancellation within 2 days of the commencement of the course = 100% of the course fee.

LEEА reserve the right to cancel courses if the number of delegates is insufficient for it to be viable to run a course.

#### **Substitutes**

If a delegate becomes unavailable before the commencement of the course, a substitute may be sent. Substitution once the course has commenced is not acceptable.

## Programme of courses

The programme set out in the training timetable is based on anticipated demand. However it can be varied according to demand, either by bespoke courses to suit a particular member's needs, or if the general demand is seen to be different from that anticipated. Therefore, if the programme does not suit your needs, please contact the LEEA office and we will try to accommodate your requirements.

## How to find us

Huntingdon is in Cambridgeshire, approximately 60 miles due North of central London. It is easily accessible by major road and rail networks and within a reasonable distance of London's international airports.

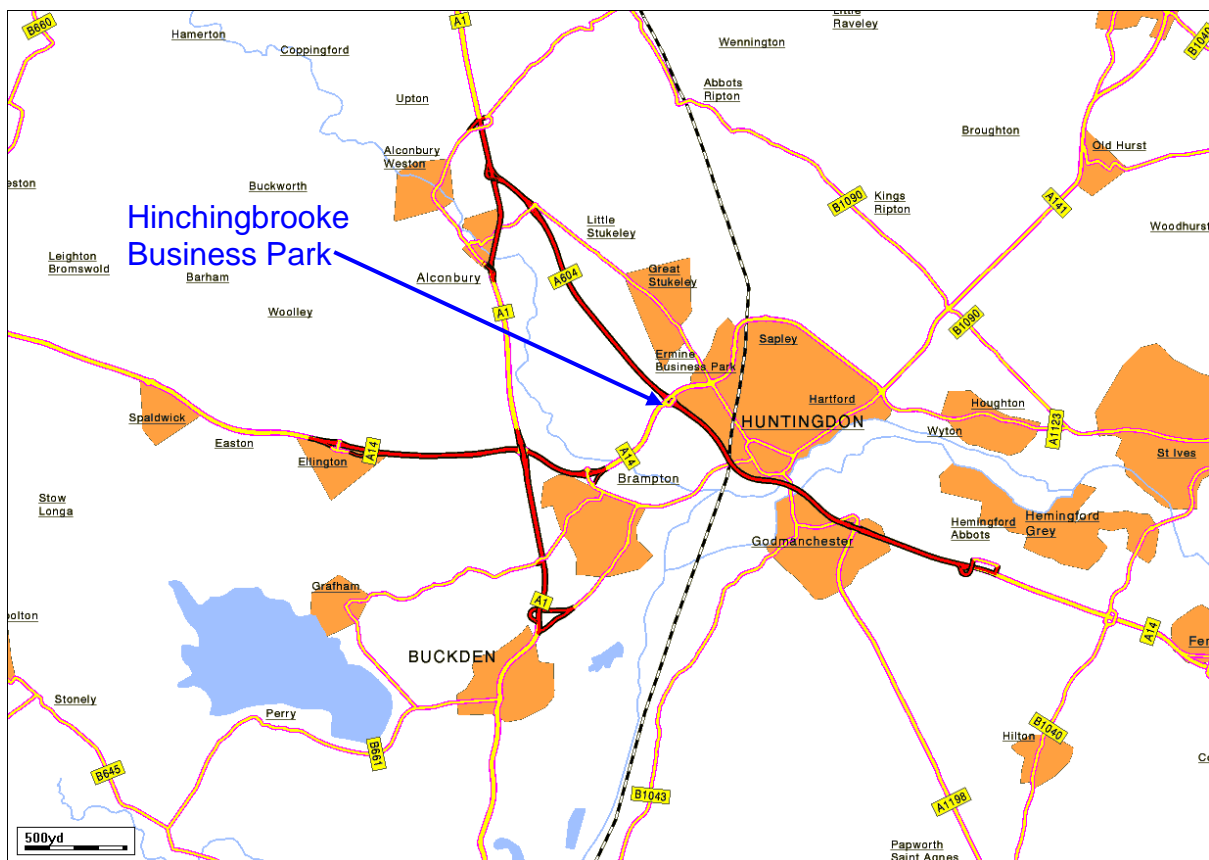
Hinchingbrooke Business Park is located at Spittals Interchange where the A14 turns west before crossing the A1. A Marriott Hotel is clearly visible on the South West corner of the junction.

## By rail

The nearest station is at Huntingdon and is on the main line North from London's Kings Cross terminus. Taxis are available at the station.

## By road

From all directions, take the A14 West from the interchange roundabout keeping to the left hand lane and IMMEDIATELY on leaving the roundabout, there is a slip road to the Hotel and Business Park. Follow the road past the Hotel, the security barrier and food factory. Osprey Court is on the left.



Please note that the A604 is now known as the A14.





The LEEA has gained CPD accreditation for IP1, IP2 and IP3 training courses from the Continual Professional Development Certification Service. All accredited courses undergo a rigorous appraisal by the CPD service to ensure that they meet the exact criteria of professional training standards. All LEEA training courses will achieve this professional accreditation by 2012.

### **What is CPD?**

It is “the systematic maintenance, improvement and broadening of professional knowledge, understanding and skill and the development of personal qualities necessary to undertake professional and technical duties throughout the practitioner’s working life”

It’s taking a structured approach to life-long learning

It’s about keeping up to date with new technical and business related subjects

It’s about being even better at what you do

It’s about skills and knowledge enhancement

With CPD accredited courses from LEEA, you can be assured of:

- confidence in standards of performance
- higher quality, consistency and reliability of training
- turning good practice into best practice
- improved skill levels and performance

