

# 06

## Motor Vehicle & Land Based Engineering



GIVE US A BELL 01664 855 444



**HONDA**  
The Power of Dreams

## » CAREERS, NOT JUST COURSES

**At BMC we have been training mechanics and engineers for many years. Our team of highly experienced industry tutors make sure that lessons are hands-on; you will be learning new skills every day and growing in confidence.**

**You will soon learn how to get that motor running!**

As farming and agriculture continues to grow, its related sectors such as land based engineering are also seeing a rise. BMC has been training service engineers for over 100 years, and though the technology may have changed, our training remains some of the best in the country. Leading manufacturers such as Honda and Grimme UK have all seen the benefits of sending their trainees to us and we are proud to be their training partner.

Considering an apprenticeship? Go to p16 for more information.



## » STUDENT PROFILES

### Phil Teague

#### LAND BASED SERVICE ENGINEERING APPRENTICESHIP

"I've been working for Grimme UK for around 2 years now and it's really exciting to be able to come to BMC and expand my experience even further. I was initially interested in motor vehicle and welding and always knew I'd be working with spanners at some point in my career."



"Now I'm looking at becoming a field service engineer within the next 5 years. Hopefully with the continued support I've been receiving, I can become a technical engineer for Grimme UK."



BMC Harvests Success with Grimme

### Tim Hing

#### ADVANCED LAND BASED ENGINEERING

"I came to BMC and did the Introduction course last year and loved it, now I've got some work experience under my belt (with Hallmark in Ashby) I thought I'd take it to the next level and return to BMC."

"I like the way every day is different, we get to work on a wide range of machines, all of which come from farmers and businesses with real problems that need fixing."

"I have found that working on these jobs I've been able to gain independence and actually solve a lot of problems and learn things myself without having to ask the tutors all the time. But the nice thing is that whenever I do need support the staff are always on hand."



## » STUDENT SUCCESS

### LAND BASED SERVICE ENGINEERING APPRENTICES CELEBRATE SUCCESS

#### Sam Perks

#### LAND BASED SERVICE ENGINEERING

**This year, BMC held a special award ceremony for Land Based Service Engineering Apprentices and we introduced a very special award in memory of Geoff Ashdown, a land based training officer who sadly passed away in September 2010.**

Geoff spent a good number of years in the industry before he came to BMC, where he shared his enthusiasm and experience with many young apprentices, helping to mould the technicians of the future.

This year, Sam Perks of long established agricultural company Alexander & Duncan, received the award for his hard work and dedication over the three years of his advanced apprenticeship. Geoff's eldest son Michael Ashdown proudly presented Sam with his award. BMC Training Officer Mike Scully said: "Today has been hugely successful with over 60 students celebrating their achievements. It has also been good to have industry partners such as Grimme UK and guest speakers like Andrew Brown, regional chair of the NFU."

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Go to p16 for more information.**



## » STUDENT PROFILE

### James Marks

#### ADVANCED LAND BASED ENGINEERING

#### WINNER - CITY & GUILDS GOLD MEDAL OF EXCELLENCE

**BMC student James Marks won the City and Guilds Medals for Excellence award this year. James had performed exceptionally well on the Advanced Land Based Engineering and this is his second Medal for Excellence award, after receiving one for his work last year.**

The medal was presented to James at a special City & Guilds award ceremony on the 26th May at the Camden Roundhouse in London. The evening ceremony is a prestigious annual event which acts as the grand finale to the annual City & Guilds Medals for Excellence programme.

From a farming background, James has developed skills in maintaining, repairing and diagnosing faults in a wide range of agricultural machinery, becoming a competent technician. James was nominated for the award while working for Cornwall Farm Machinery near Penzance.



## » STUDENT PROFILE

### Tristram Masters

#### INTRODUCTION TO MOTOR VEHICLE

**“Since I was young I remember being interested in fixing things like cars and it is something that has been in my family for years too.”**

“I had a lot of encouragement in this area and it seemed to make sense to come to a college as good as BMC”

“The practical side of this course is probably the best thing about it, I’d highly recommend it to anyone who wanted to get into mechanics, it’s probably the best way to get a good job really. I hope to one day get my own garage.”

**Considering an apprenticeship?  
Go to p16 for more information.**





## » STARTING IN MOTOR MECHANICS

### IMI LEVEL 1 PRE-APPRENTICE AWARD IN MOTOR VEHICLE

**This course is a great way to start your career in the industry. You will learn the basics to help you on your way to getting a job in the motor trade.**

#### **COURSE DURATION AND START DATE:**

A full-time 1 year course, running 3 days a week, starting in September.

#### **ENTRY REQUIREMENTS:**

2 GCSEs at Grade E or successful completion of the Stage 1 of the Grow programme on p154 or an equivalent qualification.

Applicants should have an appropriate standard of literacy, numeracy and related interests.

#### **MODULES:**

- Working safely and effectively
- Vehicle construction and routine maintenance
- Chassis technology
- Engine technology
- Transmission technology
- Auto electrics

#### **CAREER PROGRESSION AND FUTURE OPPORTUNITIES:**

You can go onto the Introduction to Motor Mechanics course or go onto an apprenticeship.

# » INTRODUCTION TO MOTOR MECHANICS

## IMI LEVEL 2 CERTIFICATE IN VEHICLE MAINTENANCE AND REPAIR

This course is for you if you want to work in a garage, dealership, or service centre, with cars or light vehicles. This is an industry recognised qualification, designed to help you get your career kick started. You'll be able to work as a trainee technician once you finish.

### COURSE DURATION AND START DATE:

A full-time 1 year course, running over 3 days per week starting in September.

### ENTRY REQUIREMENTS:

4 GCSEs at Grade D or above, or Starting in Motor Mechanics course.

### MODULES:

Students will study both the theory and practical in the following areas:

- Working Practices
  - Health and Safety in the workshop
- Routine maintenance
  - 20,000 mile service
- Chassis technology
  - Strip and examine brakes
- Engine technology
  - Remove, examine and adjust spark plugs
- Transmission technology
  - Remove and replace a clutch
- Auto electrics
  - Remove and replace a starter motor

### CAREER PROGRESSION AND FUTURE OPPORTUNITIES:

You can go onto Advanced Motor Mechanics or Advanced Land Based Engineering courses, an apprenticeship or into work.





## » ADVANCED MOTOR MECHANICS

### IMI LEVEL 3 ADVANCED CERTIFICATE IN MOTOR VEHICLE

The course develops skills in the maintenance and repair of motor vehicles to a higher standard and a further technical level.

#### **COURSE DURATION AND START DATE:**

A full-time 1 year course, running 3 days a week starting in September.

#### **ENTRY REQUIREMENTS:**

Introduction to Motor Mechanics or Introduction to Land Based Service Engineering or equivalent motor vehicle qualification.

#### **MODULES:**

Students will study both the theory and practical aspects of the following:

- Advanced engine technology
- Advanced chassis technology
- Advanced transmission technology
- Advanced electronics technology
- Practical assessment tasks

#### **CAREER PROGRESSION AND FUTURE OPPORTUNITIES:**

This course will qualify successful candidates to apply for MOT testers licence once sufficient experience attained.

# » INTRODUCTION TO LAND BASED ENGINEERING

## CITY & GUILDS LEVEL 2 DIPLOMA IN LAND BASED VEHICLES AND EQUIPMENT TECHNOLOGY

**This is a hands-on course designed for students who want to get started in machinery maintenance and repair in the agriculture and land based industries. You will learn the basic skills to get you started.**

### **COURSE DURATION:**

A full-time 1 year course, running over 4 days per week, starting in September.

### **ENTRY REQUIREMENTS:**

4 GCSEs Grade D and above including English, Maths and Science.

### **MODULES:**

- Introduction to land based workshop practice
- Introduction to principles of land based machinery
- Routine vehicle maintenance
- Component removing and refitting techniques
- Engine system principals
- Wheels, tyres, steering and suspension systems
- Work-related experience

### **CAREER PROGRESSION AND FUTURE OPPORTUNITIES:**

Move onto the Advanced Land Based Engineering or Advanced Motor Mechanics course or go onto an apprenticeship.



# » ADVANCED LAND BASED ENGINEERING

## BTEC LEVEL 3 EXTENDED DIPLOMA IN LAND BASED VEHICLES AND EQUIPMENT TECHNOLOGY

**This course is designed for you if you want to take up a career in the industry. It develops your skills in working with, diagnosing and repairing a range of equipment.**

### **COURSE DURATION:**

A full-time 2 year course, running over 4 days per week, starting in September.

### **ENTRY REQUIREMENTS:**

5 GCSEs Grade C and above including English, Maths and Science or Introduction to Land Based Engineering or Introduction to Motor Mechanics.

### **MODULES:**

- Cultivation and planting machinery
- Diagnosis and rectification of faults
- Electrical and electronic systems
- Harvesting equipment
- Hydraulic/pneumatic principles
- Mechanical power transmission

- Repair processes and materials technology
- Vehicle chassis systems
- Vehicle engine technology
- Vehicle transmission systems
- Application equipment
- CAD engineering drawing
- Individual project
- Machinery management
- Small business operations

### **WORK EXPERIENCE:**

You will need to undertake a relevant 5 month work experience placement from June to October.

### **CAREER PROGRESSION AND FUTURE OPPORTUNITIES:**

This qualification leads directly into employment in the industry at a supervisory level or into higher education in this area.

