

Biomechanical Testing of Products in the Biomedical and Healthcare* Industries

INSTITUTION

University of Central Lancashire

COURSE OVERVIEW

This course will include lectures on the scientific basis of biomechanics and will be delivered with associated tutorial sessions. These will include both mathematical work and description of movement analysis, previously recorded for different pathologies and clinical treatments. Laboratory sessions will be held in the new advanced movement analysis laboratory in UCLan's new Health building which will allow students to gain hands on experience of collecting, handling and analysing detailed biomechanical data with relevance to current clinical practice.

The programme will focus on demonstrating the correct utilisation of products and how they can have a direct impact on sustainable health, e.g. the effect that acute and chronic musculoskeletal pain has on quality of life and the effectiveness of rehabilitation products in reducing pain and increasing function.



HOW MUCH WILL THE COURSE COST?

Overall cost of course	Cost per workshop	Number of workshops
£600 – £800 for the full course	Between £150 – £200 per workshop	8 full day workshops of which candidates must attend 4

“This looks to be an excellent initiative. I have found in many cases a distinct lack of relevant biomechanical understanding in industry even in companies that design and develop human-related products. This is often due to poor funding and lack of resources but also a lack of education as to the importance of the understanding of these factors and how it can influence design. I fully support and endorse this initiative.”

Martin Haines, Managing Director, Intelligent Training Systems™

COURSE CONTENT

The course will comprise a series of eight full day workshops of which candidates must attend four. Each will be specifically targeted to the demands of the Healthcare Technology and Biomedical sector, particularly those involved with sales and development of products designed to interact with the body. All workshops can also be undertaken individually as Continuing Professional Development (CPD). The CPD courses will appeal to existing employees in the Healthcare Technology and Biomedical sectors looking to increase their knowledge base in specific areas.

On successful completion of the course, a fully validated Certificate will be awarded which will demonstrate to employers, stakeholders and customers that the student has the technical skill and knowledge to effectively assess biomechanical dysfunction and identify and utilise or design suitable rehabilitation products.

START DATE: January 2011

INNOVATIVE FEATURES

- Course content, duration and cost matched to identified industry needs.
- The potential for candidates to build up their portfolio of knowledge and understanding to gain higher awards.
- The series of workshops will allow candidates to gain a more detailed understanding of advanced movement analysis and clinical biomechanics through lectures, tutorials and hands on laboratory work, in order that this information may be used for clinical decision making and evidence based purchasing.

TARGET AUDIENCE

This provision has been developed in response to a commercial need both nationally and internationally within the Healthcare Technology and Biomedical sector. Currently there are no courses available that address the specific needs of industry to develop the knowledge base of individuals working with rehabilitation products. There are few international boundaries within this industry and this course demonstrates common global practices which will be of interest to UK, European and International companies.

Each workshop will aid the development of employers' higher level skills provision in understanding the nature of how different products can affect the biomechanics of the human body. This will address gaps in the understanding of research usage and how research can be used in marketing, enabling more employers to become research users and offers a potential link to employers to engage with higher level skills provision from HE institutions.

WHO CAN I CONTACT FOR MORE INFORMATION?

For more information about this course development please contact:

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*Subject to validation

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