



Biomass Operations and Handling Technologies is offered by ABTO in partnership with The Wolfson Centre for Bulk Solids Handling Technology at The University of Greenwich. This course has been designed to help delegates identify and resolve common problems when handling various biomass materials.

Biomass Operations and Handling Technologies will cover

- Biomass macro-economics, subsidies and potential
- Material types, flow properties and handling equipment requirements
- Self-heating, fire, explosion and safety
- Dust and degradation, pneumatic conveying and wear
- Explosion protection and ATEX regulations
- Engineering of equipment for storage and discharge
- Ship unloading
- Dust control and management
- Possible future trends in biomass

Course Format

Delivered online over five days in February 2023, the course has an emphasis on the practical aspects of technology, giving a comprehensive introduction to materials handling before moving on to the more detailed aspects dealing with biomass.

In particular, **case studies** are used to illustrate the presentations where applicable and **substantial discussion periods** are included to permit the analysis of specific problems experienced by attendees.

Who should attend?

This course is relevant to anyone who handles or is responsible for the safe transportation of biomass materials who need to gain an understanding of the reasons for the varied behaviour of the different biomass materials, as they are processed and stored, or transported around the world.

As well as personal from bulk ports and terminals, equipment suppliers and bulk shipping this includes those working in biofuel refineries, solid-fuel-fired power stations and waste to energy plants, *such as:*

- Bulk terminal executives
- Procurement executives
- Bulk terminal business development managers
- Engineers
- Equipment maintenance personnel
- Operations managers
- Stevedores
- Equipment designers and suppliers
- Safety managers and consultants
- Design consultants
- Ships Masters
- Cargo superintendents

Biomass Operations and Handling Technologies *continued*:

In-company option

This course can be delivered in-company, offering a number of benefits including cost, tailored relevance to your company and convenience.

Course fees and registration

The course fee is £950.00. To register an interest in attending Biomass Operations and Handling Technologies online or the in-company option, please contact Simon Gutteridge at events@bulkterminals.org or telephone +33 (0)3 21 47 72 19 *

Course team



Mike Bradley



Richard Farnish



Baldeep Kaur

The course leader is Mike Bradley, Professor of Bulk and Particulate Technologies and Director of The Wolfson Centre at The University of Greenwich. Mike is also Chairman of the Solids Handling & Processing Association (SHAPA) and sits on the ABTO Members' Advisory Panel. He has worked internationally on design and troubleshooting of bulk solids handling as a commercial consultant and research expert for over twenty years.

Also contributing will be Richard Farnish, Consultant Engineer, with over twenty years' experience in commercial design work related to materials handling and Dr Baldeep Kaur, a Researcher expert in the transportation of materials in the bulk solids handling industry.



* ABTO, SHAPA, MHEA, ICHCA and IMechE members are entitled to a 10% discount