



Regional Resource Centre – Marine Composite Technologies. City College Maritime Technology Centre

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City & Guilds 0771 Glass Reinforced Plastic Hand Laminating Course. Including repair techniques and examination.

Course aims.

The course is designed for all personnel, including those with little previous experience of GRP hand lay up procedure, who require the practical ability and technical skills of the GRP lay up process and various repair techniques.

COURSE OBJECTIVES

1. To develop safe working practices in storing, handling, dispensing and use of hazardous chemicals in accordance with the current statutory regulations.
2. To identify and formulate the ingredients of the resin system to manufacturers' specifications and requirements.
3. To select various glass fibre reinforcement materials and calculate resin-to-fibre ratios.
4. To apply resins and glass fibres to produce mouldings to the stated specifications and relevant standards.
5. To undertake various repair techniques to damaged GRP mouldings.
6. To identify and recognise various laminate defects.
7. To describe the methods of plug and mould-making techniques and to state the limitations for plug and mould construction.
8. To undertake the City and Guilds GRP hand laminating practical and theory tests.



REGIONAL RESOURCE CENTRE
MARINE COMPOSITE TECHNOLOGIES

City & Guilds 0771 Glass Reinforced Plastic Hand Laminating Course Programme

Time	Monday	Tuesday	Wednesday	Thursday	Friday
9.00 am	Assembly and Introduction	Mould preparation Gelcoat application Practical	Release repair preparation Practical	Internal and external repairs Practical	City & Guilds test
10.30 am	BREAK	BREAK	BREAK	BREAK	BREAK
10.45 am	GRP safety Storage, workshop, personal Lecture	Lay up Practical	External repairs Practical	Surface finishing Practical City & Guilds test preparation practical/theory	City & Guilds test
12.30 pm	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
1.30 pm	Polyester resins Types, additives, lay up procedures Lecture	Lay up Practical	External repairs Practical	Plug and Mould making Materials, methods, release Lecture	City & Guilds test Course evaluation
3.30 pm	BREAK	BREAK	BREAK	BREAK	
3.45 pm	Glass Reinforcement Types, styles, applications Lecture	Lay up Practical	Internal and external repairs Practical	Typical faults Identification, prevention, remedies Lecture	
5.00 pm	Review & Evaluate	Review & Evaluate	Review & Evaluate	Review & Evaluate	

NB: Students are to bring their own overalls and safety footwear.