

**COMPOSITE WIND BLADE REPAIR - CERTIFIED COMPOSITES TECHNICIAN (CCT WBR)**

TOPIC	Resource	Body of Knowledge %
<b>Module 1 General Composites Knowledge</b>	CCT Basic Composites Manual	5%
History and understanding of the composites industry		
Why Composites are unique and their advantages		
Introduction and selection of composite materials		
<b>Module 2 Composites Manufacturing Processes</b>	CCT Basic Composites Manual	10%
Open Molding processes		
Closed Molding and other processes		
Manufacturing process technology		
<b>Module 3 Composites and Wind Energy</b>	CCT Wind Blade Repair Study Guide	15%
Why Composites are unique and their advantages in wind energy		
Where composites are used, overview and components		
<b>Module 4 Composite Materials in Wind Energy</b>	CCT Wind Blade Repair Study Guide, CCT Basic Composites Manual	20%
The matrix		
Cores		
Adhesives		
Surface Coatings		
<b>Module 5 Composite Fabrication in Wind Energy</b>	CCT Wind Blade Repair Study Guide	10%
Fabrication Processes for Wind Energy Applications		
Secondary fabrication		
<b>Module 6 Composite Component Repair</b>	CCT Wind Blade Repair Study Guide	20%
Background, industry growth and need		
Identifying the Composite		
Damage and defect inspection - blade defects		
Damage removal		
Record of removal and documentation of damage		
Repair - process and documentation		
Field work instructions, manufacturers recommendation and quality documentation requirements		
Repair to the Lightning Protection System		
<b>Module 7 Wind Energy Composites Safety</b>	CCT Wind Blade Repair Study Guide	20%
Introduction to safety culture and requirements		
Chemicals- handling and storage		
Confined space entry		
Electricity		
Climbing		
On Site safety		

