

# JOINING OF THERMOPLASTIC COMPOSITES COURSE

## COURSE CONTENT

The course offers knowledge on the different joining techniques available for thermoplastic composites, with a focus on the welding methods. The course consists of theoretical and practical sessions, which elaborate on the following topics:

- Mechanisms underlying fusion bonding
- Potential and challenges of the different welding techniques
- The adhesion of thermoplastic composites to dissimilar materials
- Correlation between process parameters and joint quality



## WHO SHOULD PARTICIPATE?

The course aims at advanced level participants and is well-suited for engineers who are considering future application of thermoplastic composites and want to know more about the relevant joining methods. Prior knowledge of thermoplastic composites and their processing methods is advantageous.

## PRICING AND VENUE

The fee for participation in this two-day course includes course materials, lunches, drinks and a dinner. The course will take place in the lecture room and lab facility of TPRC.

### Day 1:

Welcome and introduction

#### *Theory sessions:*

Fusion bonding and welding technologies

#### *Practical sessions:*

Induction and resistance welding, NDI and microscopy

### Day 2:

#### *Theory sessions:*

Mechanical fasteners, adhesive bonding  
non-standard joining methods and  
Joint characterization

#### *Practical sessions:*

Mechanical fastening, surface preparation for  
adhesive bonding, mechanical testing

## MORE INFORMATION

If you are interested in the Joining of Thermoplastic Composites course, please contact us via [training@trpc.nl](mailto:training@trpc.nl). Other tailored courses on specific topics are available upon request. Feel free to reach out for more information.