

# SENIOR COMPOSITES TECHNICIAN

ALSO KNOWN AS: **ADVANCED COMPOSITES SPECIALIST** **COMPOSITE MATERIALS FABRICATOR**

**AEROSPACE COMPOSITES TECHNICIAN** **COMPOSITE STRUCTURES EXPERT**

## ENTER THE WORLD OF CUTTING-EDGE MATERIALS.

As a Senior Composites Technician, you'll combine strength and innovation to shape the future of manufacturing.

### KEY SKILLS

Skills which may benefit anyone considering a job as a senior composites technician include:

- ☑ Attention to detail
- ☑ Precision
- ☑ Problem solving
- ☑ Technical proficiency

### CAREER PROGRESSION

In this role, you may have the opportunity to progress to other positions. Career progression opportunities include:

- Team Leader
- Compliance and Safety Officer
- Production Planner
- Composite Engineer

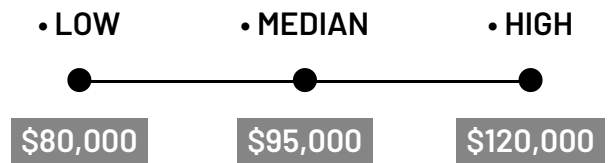
### VALUES & ATTRIBUTES

Values and attributes of anyone considering a job as a senior composites technician include:

- ☑ Innovative
- ☑ Quality-focused
- ☑ Safety-conscious
- ☑ Adaptable
- ☑ Collaborative
- ☑ Conventional – "Organiser"

### SALARY EXPECTATION

The expected salary for a Senior Composites Technician can vary across different areas of manufacturing and may vary as you become more experienced.



### RELATED INDUSTRIES

- ▶ Aerospace and Defence
- ▶ Furniture and Other Products
- ▶ General Manufacturing and Engineering
- ▶ Polymers, Plastic and Rubber
- ▶ Renewables
- ▶ Transport Equipment and Machinery

### RECOMMENDED SCHOOL SUBJECTS

- Design
- Engineering
- Engineering Skills

### CORE SCHOOL SUBJECTS

- General Mathematics
- Essential English
- Chemistry
- Industrial Technology Skills

## JOB OVERVIEW

Senior Composites Technicians are at the forefront of advanced manufacturing, specialising in the creation and manipulation of composite materials. These professionals play a crucial role in industries ranging from aerospace (including aircraft and spacecraft) and automotive to renewable energy, where lightweight yet durable materials are in high demand.

Their expertise contributes significantly to the development of more efficient and environmentally friendly products.

By working with materials like carbon fibre, fibreglass, and advanced resins, Senior Composites Technicians help create components that are stronger, lighter, and more resilient than traditional materials.

A typical day might involve designing layup schedules, operating sophisticated machinery like autoclaves and CNC cutting machines, conducting quality control tests, and collaborating with engineers to optimise product designs. The role requires a unique blend of technical knowledge, practical skills, and creativity to solve complex manufacturing challenges.

## WHAT WILL YOU DO?

Your role may include duties as follows:

1. Design and implement composite layup processes
2. Operate and maintain advanced composite manufacturing equipment
3. Conduct quality control tests on finished composite products
4. Troubleshoot manufacturing issues and develop process improvements
5. Collaborate with design teams to optimise product specifications

## HOW TO BECOME A SENIOR COMPOSITES TECHNICIAN

Becoming a Senior Composites Technician typically involves a combination of formal education and extensive hands-on experience. While entry-level positions may be available with a certificate qualification, advancing to a senior role usually requires several years of experience and ongoing professional development. Here's a pathway to this career:

1. Complete a Certificate III or IV in composites or related
2. Gain experience in composite manufacturing
3. Pursue additional certifications or advanced training in specific composite technologies
4. Accumulate several years of experience, demonstrating expertise and leadership
5. Engage in continuous learning to stay updated with emerging composite technologies

## VOCATIONAL EDUCATION & TRAINING

Vocational education plays a crucial role in preparing Composites Technicians for their careers. Relevant qualifications include:

- Certificate III in Engineering – Composites Trade (MEM31119)
- Certificate III in Polymer Processing (PMB30121)
- Certificate IV in Polymer Technology (PMB40121)
- Certificate IV in Engineering (MEM40119)
- Diploma of Engineering – Advanced Trade (MEM50119)

These qualifications provide a strong foundation in composite materials and manufacturing techniques. Additional short courses or specialised training in areas like advanced composites for aerospace or automotive applications can further enhance career prospects.

## UNIVERSITY & HIGHER EDUCATION

While not always required, some Senior Composites Technicians may pursue higher education to advance their careers or move into research and development roles. Relevant degree programs might include Bachelor of Engineering (Materials Science) or Bachelor of Science (Polymer Science and Technology). These programs provide a deeper understanding of material properties and manufacturing processes, which can be beneficial for those aiming for senior technical or management roles in composite manufacturing. The theoretical knowledge gained through these degrees complements the practical skills acquired through vocational training and on-the-job experience.