PLASTICS NZ
NEW ZEALAND'S INDUSTRY ASSOCIATION

DDSP 2024

Diploma in Design and Specification of Plastics

AUCKLAND

DDSP 2024

Diploma in Design & Specification of Plastics

Do you want to produce the best plastic parts possible? Join your colleagues and gain the essential knowledge provided by this industry-recognised plastics course. The Plastics New Zealand Diploma in Design and Specification of Plastics (DDSP) equips attendees to succeed in their careers within the Industry.

Plastic is an incredible material used extensively in the manufacture of a diverse range of products. This enables innovation and growth within many essential sectors of the NZ economy. It is a complex material with a wide range of functions, properties and manufacturing methods.

Whether you are a designer, specifier or processing technician you need an understanding of polymers and how they behave during processing. To avoid quality issues during manufacture you need to understand basic design fundamentals. To avoid negative environmental impacts, you need to consider best-practice design for the environment principles.

DDSP INTRODUCTION

Learn the jargon you need to work within the plastics industry. Introducing you to the NZ Industry, it will give you an overview of the fundamentals of plastic polymers, processing and the design process. This module provides the foundation for the remaining DDSP modules. It can also be completed as a stand-alone course.

Objectives..	Discover New Zealand's plastics Industry and its economic contributions. Learn the essential steps involved in the design process for new products. Find out how polymers are classified, their different properties, and typical applications for the most common plastics. Explore the different types of plastic processing equipment. Examine the environmental pros and cons around the use of plastics Understand the basics of safe handling and use of plastics
Date.....	Semester 1: Friday 16th February 2024, 9:00am – 4:30pm Semester 2: Friday 6th September 2024, 9:00am – 4:30pm (TBC)
Venue.....	Ellerslie Event Centre, 100 Ascot Avenue, Ellerslie, Auckland.
Audience ...	Suitable for anyone employed in the plastics industry and for those outside the industry needing to develop a basic understanding of plastics

"The DDSP has had a noticeable impact on the quality of the part designs produced by our engineers and a reduction in quality issues during manufacture."

DDSP POLYMERS

Discover the information you need to know to specify the right materials for your product. Learn how to properly troubleshoot production and quality issues. This module provides indepth information on the chemistry of polymers. Content includes different polymer families and how their configuration impacts their processing and end-use applications.

Objectives.. Learn about the molecular building blocks of polymers and how their morphology (shape) impacts their properties.
Explore thermoplastics in-depth learn how crystallinity effects behaviour.
Discover the types of testing used and how they are used to define polymers.
Learn a comprehensive procedure to help you select materials successfully.
Explore the main polymer families, their differences and applications.

Date..... Semester 1: Thursday 7th – Friday 8th March 2024, 9:00am – 4:30pm
Semester 2: Thursday 10th – Friday 11th October 2024, 9:00am – 4:30pm (TBC)

Venue..... Ellerslie Event Centre, 100 Ascot Avenue, Ellerslie, Auckland.

Audience ... This module is intended for those in plastics design, operational, production or technical sales roles within the plastics industry or those who specify the use of plastics materials for their organisation.

DDSP PROCESSING

Become more effective in your technical plastics or design role. In this module develop an advanced understanding of how various polymers behave during processing and how this impacts final part quality. Learn how additives and colourants are manufactured and how these can aid or impact processing and part performance.

Objectives.. Understand the impact of additives on processing.
Understand the thermoplastics polymer melting process.
Learn the basics of extrusion, injection moulding and silicon moulding.
Learn about the different types of additives and their uses.
Explore how processing impacts polymer morphology and part performance.
Examine the heat transfer process for thermoplastics.
Explore how material mixing, dosing and drying impact processing and performance.
Learn how thermoset polymers are processed.

Date..... Semester 1: Thursday 18th – Friday 19th April 2024, 9:00am – 4.30pm
Semester 2: Thursday 7th – Friday 8th November 2024, 9:00am – 4:30pm (TBC)

Venue..... Ellerslie Event Centre, 100 Ascot Avenue, Ellerslie, Auckland 1050

Audience ... This module is suitable for those in plastics design, operational, production or technical sales roles within the plastics industry or those who specify the use of plastics materials for their organisation.

DDSP DESIGN

Learn how to ensure your plastic parts are of a high quality and manufacturable. This module explores the design rules that contribute to good part design for plastics from both a manufacturing and an environmental perspective. Design for more advanced manufacturing techniques is examined. Includes good tool design, prototyping, simulation and 3D printing.

Objectives. Learn the basic part design 'rules' for plastics and identify key considerations for effective design for manufacture and assembly.
Examine advanced manufacturing techniques including in-mold decoration, co-moulding, co-injection and gas/water injection.
Understand the basics of tooling including design features, ejection and gating.
Explore 3D printing, prototyping and CAE simulation.

Date..... Semester 1: Thursday 13th – Friday 14th June 2024, 9:00am – 4:30pm
Semester 2: Thursday 21st – Friday 22nd November 2023, 9:00am – 4:30pm (TBC)

Venue..... Ellerslie Event Centre, 100 Ascot Avenue, Ellerslie, Auckland 1050

Audience ... Suitable for those in plastics design, operational, production or technical sales roles with in the plastics industry or those who specify the use of plastics materials for their organisation.

REGISTRATION

Semester 1 2024 **Costs are GST Exclusive**

□ DDSP Introduction: ……..….Friday 16th February 2024….$599 Members/$735 Non-Members
□ DDSP Polymers: ……. . Thursday 7th – Friday 8th March 2024….$799 Members/$985 Non-Members
□ DDSP Processing: ……Thursday 18th – Friday 19th April 2024….$799 Members/$985 Non-Members
□ DDSP Design: ……...Thursday 13th – Friday 14th June 2024....$799 Members/$985 Non-Members

Semester 2 2024 — DatesTo Be Confirmed **Costs are GST Exclusive**

□ DDSP Introduction: …..……....Friday 6th September 2024…$599 Members/$735 Non-Members
□ DDSP Polymers: ……..Thursday 10th – Friday 11th October 2024...$799 Members/$985 Non-Members
□ DDSP Processing: …....Thursday 7th – Friday 8th November 2024..$799 Members/$985 Non-Members
□ DDSP Design: ……...Thursday 21st– Friday 22nd November 2024..$799 Members/$985 Non-Members

Name(s).....

Company .....

Address.....

Phone.....Email .....

Special dietary requirements:.....

Total amount paid $ …….. (If paying by credit card please add an additional 3%)

□ Credit Plastics NZ bank account: ANZ. Auckland 01 1839 0035879 00
□ Visa □ Mastercard □ Cheque enclosed □ Company invoice

Name on card ……..…Number on card ……

Expiry date ……/…… Signature .....

Send to: Plastics New Zealand PO Box 76378, Manukau City, Auckland 2241.
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