

IT NUMBER	MODULE	SCOPE	EXAMINATION
<b>PL: 181440 Sustainability and Environment</b>	<b>2</b>	<b>3</b>	<b>PL: KMP</b>

This course is about the understanding what sustainable printing methods are available in the market.

The course will cover five major technologies and trends:

- LED UV Printing
- Recycled Paper
- Digital Printing
- Carbon Balanced Paper
- Carbon Balanced Print

## CONTENT

### LED UV Printing

LED UV is a printing method for brochures, booklets, leaflets and promotional material. Using ultraviolet light for an instant drying process, colours are left more vivid and the designs are much sharper - creating a lasting impact.

In terms of environmental viability LED UV Printing is a new printing method. Firstly it uses less power than traditional print-drying technology and the instant on/off functionality reduces standby consumption between jobs and reduces overall CO2 emissions. Secondly, the instant drying process means there's no need for an anti-set off powder spray or a sealing coat.

Students learn about the technologies, applications, and eco efficiency.

### Recycled Paper 101

Paper or stock choice can influence how sustainable a printing method actually is. We are often led to believe we should only be using recycled paper if we want to be more green. The truth is, virgin fibres are needed to maintain the paper cycle. Without new fibres, from new trees, the paper cycle cannot be maintained. Recycled fibres degrade after several uses and the paper industry needs fresh fibre to keep the renewable cycle going.

Students learn about the paper recycling process, alternatives to paper.

### Digital Printing

Digital print is an ideal method to reduce waste by printing individualized and personalized content on demand. Less warehousing stock and resources are needed. Students learn about the technologies, applications, and eco efficiency.

### Carbon Balanced Paper

Carbon Balanced reduces the average CO<sub>2</sub> created during the entire paper production and mill delivery have been offset. Students will learn about the processes and eco efficiency.

### Carbon Balanced Print

The process involves measuring the CO<sub>2</sub> outputs of the whole company. After this is determined, the print supplier invests in ways in which its CO<sub>2</sub> output can be lessened or even reversed to balance the entire print process.

## LEARNING OUTCOME

- Students learn about creating sustainable and resilient solutions to complex socioecological problems;
- Students study systems thinking, strategic and futures thinking;
- Students develop the knowledge, skills, and experiences that are best practices;
- Students learn about change initiatives designed to increase environmental sustainability across printing systems.