

# Interdisciplinary Program in Polymer Engineering

## List of Core and Complementary Courses

**MSc:** At least 12 pts from Lists A and B, at least 6 pts from List A

**ME:** At least 20 pts from Lists A and B, at least 10 pts from List A

ME: Up to 16 pts in Management, Economics, Quality Assurance and Reliability

Interdisciplinary  
Program in Polymer  
Engineering

התוכנית  
הבין-יחידתית  
להנדסת פולימרים



### List A: Core Courses

- 019149 – Mechanics of Soft Materials (2 pts)
- 036093 – Mechanics of Composite Materials 1 (3 pts)
- 046012 – Introduction Flexible Organic Electronics (2 pts)
- 056120 – Electron Microscopy of Soft Matter (2 pts)
- 056386 – Fundamentals of Polymer Processing (2 pts)
- 058129 – Structure and Properties of Polymers (2 pts)
- 058162 – Polymer Processing (2 pts)
- 058172 – Polymer Thermodynamics (2 pts)
- 058173 – Physical Methods for Polymer Characterization (2 pts)
- 058181 – Structure Determination by Scattering (2 pts)
- 058183 – Polymers in Biotechnology 2 (2 pts)
- 058184 – Polymer Characterization Laboratory (2 pts)
- 058187 – Self Assembly in Polymer Systems (2 pts)
- 066217 – Packaging for Food, Medicine and Biological Products (3 pts)
- 066247 – Advanced Materials for Food and Biotechnology (2 pts)
- 066248 – Rheology (2 pts)
- 118113 – Statistical Mechanics of Polymers (2 pts)
- 127724 – Introduction to Polymer Chemistry (2 pts)
- 127740 – Polymers: From Synthesis to Architecture (2 pts)
- 316000 – Structure and Behavior of Polymers (2.5 pts)
- 318101 – Porous Polymers (2 pts)
- 318422 – Advanced Composite Materials (2 pts)
- 318520 – Materials Engineering for Organic Electronics (2 pts)
- 318621 – Selected Topics in Plastic Materials\* (2 pts)
- 318721 – Polymer Surfaces and Interfaces (2 pts)
- 318722 – Structure and Properties of Crystalline Polymers (2 pts)
- 318724 – Polymer Blends: Structure and Properties (2 pts)
- 318530 – Thermodynamics and Mechanics of Polymers (2 pts)
- 338401 – Biomaterials (2 pts)
- 858121 – Polymer Rheology (2 pts)
- 858124 – Advanced Topics in Polymer Engineering 1  
Complex Polymer Systems for Advanced Applications (2 pts)

### List B: Complementary Courses

- 019516 – Plastics in Building (2 pts)
- 036104 – Non-Newtonian Fluid Mechanics (3 pts)
- 038802 – Experimental Methods in Micro Flows (3 pts)
- 038805 – Computational Micromechanics of Composite Materials (3 pts)
- 056140 – Colloidal Systems (2 pts)
- 056166 – Surface Phenomena (2 pts)
- 056383 – Complex Fluids (2 pts)
- 056396 – Particulate Fluids (2.5 pts)
- 056397 – Membrane Separations: Physical Principles and Advanced Materials (2.5 pts)
- 066521 – Tissue Engineering (2pts)
- 086522 – Mechanics of Nonlinear Composites (3 pts)
- 127730 – Structure Determination by Physical Methods
- 318529 – Analytical Electron Microscopy (2 pts)
- 336528 – Controlled Drug Release (2.5 pts)