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LIVING MACHINES

Do you want to **apply engineering principles and concepts** to problems in the Life and Medical Sciences through various biotechnology innovations?

In the **New Engineering Education Transformation (NEET) Living Machines (LM) thread,** you will have the opportunity to work on disruptive research areas, united by a theme of improving our understanding of and developing therapies for human disease, such as:



NEET is a 3-year certificate program you opt in to as a sophomore and complete along with your major. Meet and connect with NEET students in the NEET Scholars Collaboration Space (3-001).



LM LEAD INSTRUCTOR

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LEARN MORE

Toward your dreams



neet.mit.edu neet@mit.edu

THREAD REQUIREMENTS

20.051 Introduction to Living Machines (6 units)

Choose two subjects (one underlined, one italic) from one of six Living Machines tracks:

Synthetic Biology and BioManufacturing

<u>Choose one: 10.28 (10.28 A&B), 10.29, 20.129/6.4880, or 20.109</u> Choose one: 2.180/6.027, 10.321, 10.345, 20.305/6.580, 7.36, 7.38, 7.46, 10.03/7.458, or 10.442

Biotechnology for Environmental Engineering

<u>Choose one: 10.28 (10.28 A&B), 10.29, 20.129/6.129, 20.109, 20.106/1.084, 7.21, 12.004, or</u> 7.30/1.018/12.031 Choose one: 2.180, 20.305/6.580, 1.089, 1.063, 1.088, 7.26, or 12.007

Immune, Cancer and Infection Engineering

Choose one: 20.230/7.23, 1.088, 7.21, or 20.106/1.084 Choose one: 20.365, 7.24, 7.26, 1.063, 7.36, or 7.371

Tissue Engineering

<u>Choose one: 2.793/20.230/6.4830, or 20.310/2.797/6.4840/3.053</u> Choose one: 20.375, 20.363/3.055, 7.46, 6.4820/2.792/HST.542, or 2.787/HST.535

Microfluidic Device Engineering

<u>Choose one: 2.793/20.330/6.4830, 10.301, 2.005, 2.674, 1.060, 1.066/8.292/12.330, or 1.063</u> Choose one: 2.676, 20.334, or 6.2600/3.155

Computational Biology

<u>Choose one: 20.260, 6.3900, or 20.390/6.8711</u> Choose one: 20.320, 2.180, or 20.334

Research Immersion

Internship, Two-semester UROP + 20.054, Thesis or iGEM

Intellectual Diversity Requirement

A core subject from outside of your major

Attend Living Machines Activities and Talks

LM FOUNDING FACULTY LEAD

Professor Linda Griffith

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