

# DESIGNING EFFICIENT DEEP LEARNING SYSTEMS

June 17–18, 2023 | Instructor: Vivienne Sze | [professional.mit.edu/dls](https://professional.mit.edu/dls)

*Note: All times are US Eastern Daylight Time. Schedule is subject to change.*

DAY 1: WEDNESDAY, JUNE 17	
9:30–10:30 AM	<ul style="list-style-type: none"> <li>• Introduction and Course Overview</li> <li>• Background on Deep Learning</li> <li>• Deep Learning Applications</li> <li>• Overview of Deep Neural Networks</li> </ul>
10:30–11:00 AM	<b>BREAK</b>
11:00AM–12:30 PM	<ul style="list-style-type: none"> <li>• Popular Deep Neural Network Models</li> </ul>
12:30–1:30 PM	<b>LUNCH BREAK</b>
1:30–3:00 PM	<ul style="list-style-type: none"> <li>• Development Resources for Deep Learning</li> <li>• Training Deep Neural Network Models</li> <li>• Metrics for Evaluating Deep Learning Systems</li> </ul>
3:00–3:30 PM	<b>BREAK</b>
3:30–5:00 PM	<ul style="list-style-type: none"> <li>• Deep Learning on Programmable Platforms</li> <li>• Discussion and Day 1 Summary</li> </ul>

DAY 2: THURSDAY, JUNE 18	
9:30–10:30 AM	<ul style="list-style-type: none"> <li>• Recap of Day 1 and Discussion</li> <li>• Deep Learning on Specialized Hardware (Part 1)</li> </ul>
10:30–11:00 AM	<b>BREAK</b>
11:00AM–12:30 PM	<ul style="list-style-type: none"> <li>• Deep Learning on Specialized Hardware (Part 2)</li> <li>• Use of Advanced Technologies</li> </ul>
12:30–1:30 PM	<b>LUNCH BREAK</b>
1:30–3:00 PM	<ul style="list-style-type: none"> <li>• Co-optimization of Algorithms and Hardware</li> </ul>
3:00–3:30 PM	<b>BREAK</b>
3:30–5:00 PM	<ul style="list-style-type: none"> <li>• Discussion on Trends in Deep Learning</li> <li>• Discussion and Day 2 Summary</li> </ul>