

<b>ICS 431 : Computer Architecture (3 cr.)</b>			
<b>Description</b>	Memory management, control flow, interrupt mechanisms, multiprocessor systems, special-purpose devices.		
<b>Prerequisites</b>	<a href="#">331</a> .		
<b>Learning Objectives</b>	<ul style="list-style-type: none"> <li>• understand how computers are designed</li> <li>• have an appreciation for different computer architectures</li> <li>• be able to discourse intelligently about computer performance</li> </ul>		
<b>Topic List</b>	<b>#</b>	<b>Topic</b>	<b>Lecture Hours</b>
	1	Introduction, exams, final review	7.0
	2	Performance measurement and evaluation	4.0
	3	Machine instructions and arithmetic (review and different perspective on material from ICS 312 and ICS 331)	5.0
	4	Processor Datapath and Control implementation	5.0
	5	Pipelining	4.0
	6	Memory Hierarchies and Caching	4.0
	7	Peripherals and Interrupts	5.0
	8	Multiprocessors	5.0