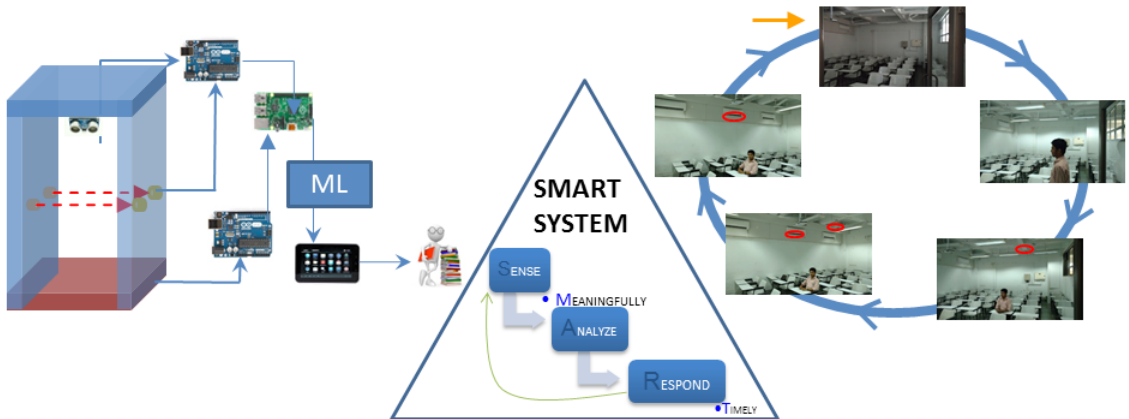


# Managing energy, computationally



Smart Academic Environment: Our solutions showcased in campus buildings

Slot	SIC 205	SIC 305	SIC 201	SIC 301		Slot	SIC 205	SIC 305	SIC 201	SIC 301
1						1				
2	HS 490 (12)		CS 681 (36)	CS 435 (68)		2	HS 490 (12)	CS 681 (36)		CS 435 (68)
3			CS 735 (53)	CS 718 (38)		3	CS 718 (38)		CS 735 (53)	
4		CS 632 (16)	CS 743 (31)			4	CS 743 (31)	CS 632 (16)		
5						5				
6						6				
7	CS 735 (14)		CS 736 (36)	CS 741 (54)		7	CS 735 (14)	CS 736 (36)		CS 741 (54)
8						8				
9				CS 775 (30)		9		CS 775 (30)		

OLDSCHEDULE

Slot	SIC 205	SIC 305	SIC 201	SIC 301
1				
2	HS 490 (12)	CS 681 (36)		CS 435 (68)
3	CS 718 (38)		CS 735 (53)	
4	CS 743 (31)	CS 632 (16)		
5				
6				
7	CS 735 (14)	CS 736 (36)		CS 741 (54)
8				
9		CS 775 (30)		

NEW SCHEDULE

Efficient use of energy is an age-old goal. But its importance has become even more apparent with the increased emphasis on human development and the increased use and thirst for more energy that it engenders.

Our focus is on addressing energy concerns through the use of information and communication technologies:

- We develop processing and communication tools to improve the efficiency and responsiveness of energy management systems.
- We capitalise on the ability of IoT (Internet of Things) devices to inform us about the current state of the system and provide a timely and situation-aware response, backed up by analysis.
- We synthesise and benefit from numerous technologies, including net metering, demand response, distributed generation from intermittent sources such as solar and

wind, active control of power flows, enhanced storage capabilities, and micro-grids.

- We believe that for a 'system' to be SMART, it should Sense Meaningfully, Analyse and Respond Timely.

All of these are possible thanks to small footprint wireless sensors and other IoT devices, advanced analytics that reveal insights heretofore not apparent, and faster processors that ensure real-time responses to events and specific conditions.

We are developing smart solutions for a variety of applications: building energy management, disaster management, urban resource management, etc. The solutions make minimal use of physical sensors by employing additional (soft sensing) resources, by using the principle of observability and through very effective optimisation techniques. We have incorporated our solutions in our smart labs, offices and classrooms and will continue to make more spaces smart.