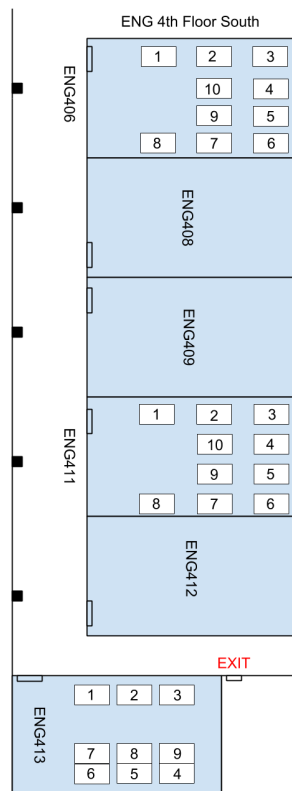


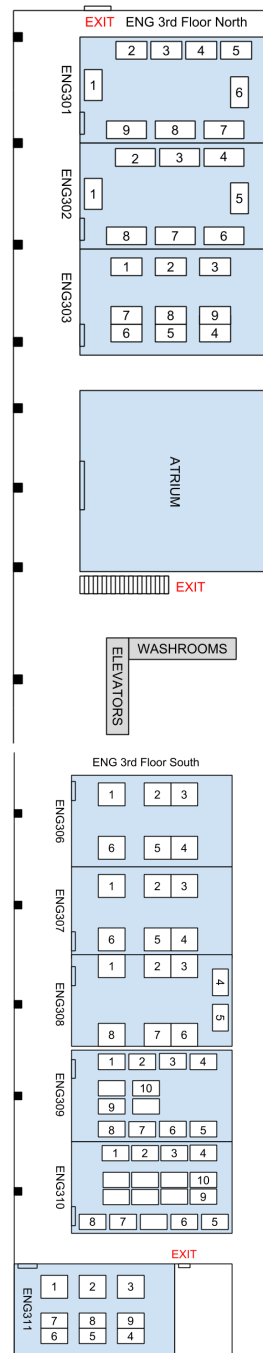
## ENG 413

- DEVICE FOR ARTHRITIS MASSAGE WITH SENSORY CONTROL AND DATA COLLECTION • C. Nguyen, A. Clemeno, N. Bucsit • Dr. Grant <sup>ⓑ</sup>
- IOT DASHBOARD • T. Rabbani, J. Stacey, W. Barreto • Dr. Mohammadi <sup>ⓐ</sup>
- SOFTWARE DEFINED NETWORK MPLS ROUTING IMPLEMENTATION • A. Yiu, D. Zhang, S. Lam • Dr. Ma <sup>ⓐ</sup>
- SOUND LEVEL MONITOR FOR AUDIO HEAD PHONE • Z. Ghaneshirazi, A. Levstek, F. Nassif • Dr. Ghali <sup>ⓑ</sup>
- ENVIRONMENT SENSING GLOVE • A. Surabi, A. Lad, C. De Silva • Dr. Fernando <sup>ⓐ</sup>
- SMART WHEELCHAIR FOR PHYSICALLY CHALLENGED INDIVIDUALS • A. Alfakir, N. Hafez, H. Mahdi • Dr. Ghali <sup>ⓑ</sup>
- MACHINE-LEARNING BASED DDOS ATTACK DETECTION IN SDN • H. Kamal, D. Rataul, L. Tang • Dr. T. Ma <sup>ⓐ</sup>
- SMART MUSCLE RELAXER • S. Ahmed, K. Jama, S. Shafiq • Dr. Ghali <sup>ⓑ</sup>
- AUTOMATED DRIVER MONITORING AND ALERT SYSTEM • S. Bari, D. Patel, N. Kontham • Dr. Anpalagan <sup>ⓐ</sup>

## ENG 4TH FLOOR MAP



## ENG 3RD FLOOR MAP



## CAPSTONE DESIGN PROJECT OPEN HOUSE

10:00AM – 5:00PM, APRIL 26, 2019  
3rd & 4th FLOORS, 245 CHURCH ST.

THE PROJECTS ARE LISTED BY ROOM AND INCLUDE: THE BENCH NUMBER, TITLE, STUDENTS, FACULTY SUPERVISOR & PROJECT CATEGORY (SEE LEGEND BELOW). TO LOCATE A SPECIFIC BENCH CONSULT THE FLOOR-PLANS ON THE BACK OF THIS GUIDE.

### PROJECT CATEGORY LEGEND

- <sup>ⓑ</sup> BIOMEDICAL    <sup>ⓐ</sup> COMMUNICATION    <sup>Ⓜ</sup> COMPUTER/MICROSYSTEMS  
<sup>Ⓟ</sup> POWER    <sup>Ⓡ</sup> ROBOTICS    <sup>Ⓢ</sup> SOFTWARE










### ENG 301

- IMAGE ENCRYPTION • A. Sarancha, A. Bhatt, T. Pradan • Dr. Yang <sup>Ⓢ</sup>
- POSTURAL CORRECTION THROUGH SENSOR DRIVEN FEEDBACK • K. Kasaei, V. Gnatenko, R. Al-Loos • Dr. Grant <sup>ⓑ</sup>
- CONNECTING TO IOT DEVICES USING DNS • B. Adhikari, M. Amanzai, L. Marcos • Dr. Mohammadi <sup>ⓐ</sup>
- GESTURE RECOGNITION FOR ASL • K. Chan, L. So, J. Lee • Dr. Grant <sup>ⓑ</sup>
- DEVELOPING CODING CURRICULUM FOR LEGO MINDSTORMS EV3 • E. Sahayathasan, B. Chong, F. Esayas • Dr. T. Yang <sup>ⓐ</sup>
- VISUAL ODOMETRY FOR AUTONOMOUS DRIVING • A. Chow, J. Sun, A. Javid • Dr. Guan <sup>ⓐ</sup>
- DERMATOLOGICAL TOOL FOR AUTOMATICALLY IDENTIFYING SKIN CANCER • S. Rabbani, R. Tanvir, S. Zahra • Dr. Grant <sup>ⓑ</sup>
- ONLINE HOME AUTOMATION USING WIRELESS MESH NETWORKS • O. Ahmad, M. Dibbasey, A. Kamson • Dr. Mohammadi <sup>ⓐ</sup>
- TOXICOLOGY SENSOR NETWORK • M. Batool, D. Ekubor, N. Esfandi • Dr. Mai <sup>ⓑ</sup>







### ENG 302

- DESIGN OF A VARIABLE AC OUTPUT FROM A SOLAR PANEL • L. Rathgeb, P. Iacono, I. Bykov • Dr. Karim <sup>Ⓟ</sup>
- SMART PAD & GPS LOCATOR FOR INFANT CAR SEAT AND STROLLER • T. Le, R. Janjic, B. Nguyen • Dr. Umapathy <sup>ⓑ</sup>
- AUGMENTED IMAGE EXPERIENCE • P. Arora, H. Khan, K. Tsuenchy • Dr. Guan <sup>ⓐ</sup>
- OVERALL SURVIVAL PREDICTION TOOL FOR MCRPC PATIENTS • S. Evans, D. Yip, A. Ghuman • Dr. Grant <sup>ⓑ</sup>
- SLEEP MONITOR FOR PRESSURE ULCER AND FALL PREVENTION • K. Daoud, R. Yousef, M. Saleeb • Dr. Ghali <sup>ⓑ</sup>
- 3D PRINTED PROSTHETIC HAND • S. Tekeste, A. Ali • Dr. Grant <sup>ⓑ</sup>
- CLOUD SERVICE FOR SMART BUILDINGS • C. Dokurno, D. Bonilla, J. Yeung • Dr. Jaseemuddin <sup>ⓐ</sup>
- AUTOMATION OF A CONTINUOUS FLOW BIOREACTOR FOR CARTILAGE TISSUE ENGINEERING • J. Nimalraaj, A. Goudswaard, K. Jok • Dr. Waldman <sup>ⓑ</sup>







## ENG 303

- 1 • DEVELOPMENT OF RAPID PROTOTYPED BIOREACTORS FOR CARTILAGE TISSUE ENGINEERING • P. Mohini, D. Polintan, S. Pui • Dr. Waldman 
- 2 • SMART CITY APPLICATION • C. Lui, C. Lu, A. Guergachi • Dr. Jaseemuddin 
- 3 • DEVELOPING CODING CURRICULUM FOR LEGO MINDSTORMS EV3: BRIDGE LAYER • M. Zizovski, M. Strauss, S. Yassawi • Dr. T. Yang 
- 4 • LOWER BODY POSTURAL CORRECTION SYSTEM WITH SENSOR-DRIVEN FEEDBACK • M. Basso, A. Gibicar, R. Valtellini • Dr. Grant 
- 5 • DESIGN OF NUCLEAR STEAM HP-LP TURBINES CONTROL SYSTEM • A. Avvali, E. Kruja, B. Ibrahim • Dr. Cheung 
- 6 • PERSONALIZED PROSTHESIS 2.0 – SHORT ARM CAST • K. Minhas, S. Kissana, P. Saravanabava • Dr. V. Yang 
- 7 • DEVELOPMENT OF AN AUTOMATED DEVICE FOR TRACHEAL TISSUE ENGINEERING • S. Orlando, N. Kovacs, L. Sami • Dr. Waldman 
- 8 • WEATHER PREDICTION IMPLEMENTED IN PARALLEL ON CLOUD PLATFORM • Y. Bhatt, S. Blake, L. Sukumar • Dr. Mekheil 
- 9 • RESCUE ROBOT • T. Casey, S. Litt, A. Jahangir • Dr. Fernando 





## ENG 306





- 1 • PROGRAMMABLE CARDIAC ACTIVATION DISPLAY • R. Pirabakaran, H. Ahmed, K. Soon • Dr. Umaphathy 
- 2 • SOLAR INDUCTION COOKER USING ARDUINO MICROCONTROLLER • S. Rafique, E. Ung, F. Baten • Dr. Karim 
- 3 • ENERGY FROM THE WALL • A. Bavanathan, A. Musa, M. Choudhry • Dr. Fernando 
- 4 • HARDWARE DESIGN OF SECURE HASH ALGORITHM 256 • M. Nithiyandan, S. Treacy, T. Greenidge • Dr. Khan 
- 5 • VIRTUAL REALITY TRUNK MUSCLE TRAINING SYSTEM • G. Gray, B. Krishnan, S. DiGirolamo • Dr. Mai 
- 6 • STRESS MONITORING THROUGH FOOTWEAR • K. Joulji, A. Marzo, S. Denkovski • Dr. Umaphathy 

## ENG 307











- 1 • 20 WATT PV SIMULATOR – DC/DC CONVERTER DESIGN • P. Gogna, D. Virk, U. Kazi • Dr. Mohammadi 
- 2 • SMART PV CHARGER FOR LI-ION BATTERY USING MPPT • B. Perera, R. Mamar, Y. Vyas • Dr. Mohammadi 
- 3 • DESIGN OF AN EXTREMELY MINIATURE SATELLITE • B. Santos, O. Nakhuda, H. Yeung • Dr. Kumar 
- 4 • BATTERY MANAGEMENT SYSTEM • F. Karandysovsky, P. Gallardo, A. Berea • Dr. Xu 
- 5 • MICROGRID STEADY STATE ASSESSMENT • S. Ali, M. Tahsin, K. Butt • Dr. Venkatesh 
- 6 • TREMOR DATA-LOGGER FOR PARKINSON'S DISEASE PATIENTS • L. DeVos, G. Umanzor, S. Sandhu • Dr. Ghali 

## ENG 308

- 1 • NUCLEAR STANDBY GENERATOR CONTROL AND PROTECTION SYSTEM • A. Hasan, U. Saeed, N. Biswas • Dr. Cheung 
- 2 • ROBOTIC BARTENDER • S. Kassam, A. Spiteri, C. Niuosci • Dr. Mohammadi 
- 3 • DESIGN OF RESIDENTIAL-AREA ELECTRICITY DISTRIBUTION NETWORK AND PROTECTION • A. Qazi, D. Kim, A. Saran • Dr. Cheung 
- 4 • ELECTRIC DRIVE TRAIN • W. Ahmad, K. Bhachu, R. Fernando • Dr. Venkatesh 

- 5 • SEMI-AUTONOMOUS DRIVING SYSTEM • C. Fernando, A. Tabibi, K. Motevalizadeh • Dr. Venkatesh 
- 6 • 360 DEGREE IMAGING MODULE • S. Mistry, E. Nidoy, J. Lin • Dr. Guan 
- 7 • DESIGN OF NUCLEAR GENERATING STATION GROUNDING • G. Eldarova, K. Rajan, M. Santorelli • Dr. Cheung 
- 8 • OBJECT COLOR DETECTION USING A DRONE • Y. Saciharan, K. Kharbanda, N. Jegarajah • Dr. T. Yang 










## ENG 309

- 1 • BREATHING MONITOR FOR REAL TIME RATE DETECTION • D. Iaboni, J. Co, A. Gagné • Dr. Ghali 
- 2 • THE ELECTRONIC MIND READER • J. Zhou, N. Alam, M. Muhammad • Dr. Fernando 
- 3 • RADIATION GUIDE 2.0 – SYSTEM FOR PATIENT TRACKING DURING RADIATION THERAPY USING IMU • R. Ragunathan, S. Patel, K. Vithiyatharan • Dr. V. Yang 
- 4 • AUTONOMOUS DRONE CHARGING SYSTEM • J. True, T. Zaitsev, S. Afzal • Dr. Guan 
- 5 • ROBOTIC PORTER • S. Bhati, P. Ling, A. Yogarathnam • Dr. V. Yang 
- 6 • DRONE MITIGATION SYSTEM • M. Shaikh, B. Duong, R. Ly • Dr. Mohammadi 
- 7 • LI-ION BATTERY CELL TESTING SYSTEM • D. Ferguson, O. Ahmad, N. Warias • Dr. Xu 
- 8 • BALANCE TRAINER BIOFEEDBACK SYSTEM • N. Alicibusan, S. Ciardullo, K. Balijepalli • Dr. Mai 
- 9 • HOME ENERGY OPTIMIZATION USING ENERGY STORAGE • C. Sarathchandra, M. Khan, P. Vigneswararajah • Dr. Xu 
- 10 • ACCURATE TABLE RETRIEVAL FROM UNSTRUCTURED SOURCES • V. Vaghela, F. Peygunbari, N. Azeez • Dr. Bagheri 








## ENG 310

- 1 • AI SMART HOME MONITORING AND CONTROL SYSTEM • M. Atto, M. Bhavsar, G. Fabiano • Dr. Anpalagan 
- 2 • OPEN SOURCE PROSTHETIC ARM WITH NON-INVASIVE EMG CONTROL • M. Sachdeva, J. Polus, S. Sandal • Dr. V. Yang 
- 3 • INTELLIGENT THERMOSTAT • I. Simic, H. Khan, N. Khan • Dr. Venkatesh 
- 4 • BURGLAR DETECTION IN DARK • A. Cayabyab, J. Cheema, K. Sangha • Dr. Fernando 
- 5 • VIRTUAL TAILOR 2.0 - 3D MOBILE IMAGING FOR THE MEASUREMENT AND TAILORING OF CUSTOM WEAR • R. Ludin, A. Nath, A. Ahmed • Dr. V. Yang 
- 6 • MICROGRID– TECHNO-ECONOMIC ASSESSMENT • E. Achiluzzi, K. Kobikrishna, A. Sivabalan • Dr. Venkatesh 
- 7 • 3D MOBILE IMAGING APPLICATION FOR RECONSTRUCTIVE JAW SURGERY FOCUSING ON HEMIFACIAL MICROSOMIA • L. Alam, H. Patel, R. Thevakumaran • Dr. V. Yang 
- 8 • GENERATING REVIEWS FOR GOLD PRODUCTS • I. Maystorovich, M. Tamannaee, S. Heirani • Dr. Bagheri 
- 9 • AUTOMATED GARDENING USING WIRELESS SENSOR MESH NETWORK • B. Lim, J. An, D. Zhang • Dr. Anpalagan 
- 10 • CROWDSOURCING BASED ROAD CONDITION MONITORING SYSTEM • E. Suleimanyar, S. Ranjitheswaran, Z. Chen • Dr. Anpalagan 







## ENG 311

- 1 • 3D PROSTHETIC ARM WITH MICROCONTROLLER • S. Qureshi, S. Sohail, S. Misbahuddin • Dr. Grant 
- 2 • ONLINE POWER FLOW ASSESSMENT TOOL • J. Psaila, D. Brandolino, A. Mazzucco • Dr. Venkatesh 
- 3 • SEMI AUTONOMOUS ROBOT ASSISTANT (SARA) • S. Gtat, G. Cruzat, S. Saidi • Dr. Fernando 
- 4 • CUFF-LESS BLOOD PRESSURE MONITOR • S. Mahmud, A. Wijaya, V. Srivastava • Dr. Ghali 
- 5 • PREDICTING TWITTER USER'S INTERESTS USING LINK PREDICTION OF UNOBSERVED LATENT SPACES • R. Tieu, T. Rand • Dr. Bagheri 
- 6 • INTELLIGENT MOUSE • M. Sanayeparvar, A. Khan, P. Fontanilla • Dr. Kassam 
- 7 • SOLAR INDUCTION COOKER USING 555 TIMER • D. Patel, R. Chauhan, N. Desai • Dr. Karim 
- 8 • DIGITAL STETHOSCOPE WITH ABNORMAL SOUND DETECTION CAPABILITY • G. Ellis, N. Goveia, N. Vagners • Dr. Ghali 
- 9 • COMPLEX ANSWER RETRIEVAL FOR QUESTION ANSWERING SYSTEM • D. Shandrasekaran, S. Suri, P. Guntaka • Dr. Bagheri 

## ENG 406

- 1 • PARALLEL COMPUTING FOR ARTIFICIAL INTELLIGENCE • K. Saad, K. Patel, B. Balachandran • Dr. Mekheil 
- 2 • INFRASTRUCTURE AS A SERVICE IN OPENSTACK • A. Kannoth, C. Chuang, S. Shaikh • Dr. Ma 
- 3 • REDUCING WAITING TIME IN ER THROUGH AI • M. Guanipa, J. Daez, Z. Wu • Dr. Jaseemuddin 
- 6 • SMART PHONE QUALITY OF SERVICE METER • Y. Al-Muzaini, R. Austin, P. Mai • Dr. Anpalagan 
- 7 • VEHICLE PARKING AND DATA MANAGEMENT SYSTEM • P. Youwakim, M. Tanus, Z. Rawoof • Dr. Anpalagan 
- 8 • DDOS ATTACK DETECTION SYSTEMS IN SOFTWARE DEFINED NETWORKING • A. Diab, F. Al-Awartani, D. Kumar • Dr. Ma 
- 10 • DESIGN OF COMMERCIAL-FACILITY ELECTRICITY DISTRIBUTION NETWORK AND PROTECTION • L. Moskvichev, J. Lim, V. Rashev • Dr. Cheung 

## ENG 411

- 1 • SMART HOME NETWORK • V. Mehra, C. Garcia, M. Bradley • Dr. Jaseemuddin 
- 2 • DYNAMIC ELECTRIC VEHICLE CHARGING STATION • E. Luo, J. Liu, A. Nikolovski • Dr. Xu 
- 3 • OPEN SOURCE PROGRAMMABLE DEVICES FOR IOT SYSTEM • S. Ahluwalia, D. Parikh, M. Qureshi • Dr. Mohammadi 
- 6 • HUMAN-ROBOT INTERACTION IN EDUCATION • A. Howady, Z. Hlimi, S. Ragunayakam • Dr. T. Yang 
- 7 • DEVELOPMENT OF CODING CURRICULUM OF HUMANOID ROBOT • A. Antunes, H. Bilimoria, W. Mahmood • Dr. T. Yang 
- 8 • BUILDING USER COMMUNITIES BY DEEP NEURAL EMBEDDING • S. Vigneswararajah, M. Manokaran, R. Rajenthiran • Dr. Bagheri 
- 10 • DESIGN OF A SMART ELECTRICITY DISTRIBUTION SYSTEM • M. Fera, S. Sayanthan, S. Arabastani • Dr. Cheung 