ENG 311

1 • GROUP KEY MANAGEMENT FOR MULTICAST COMMUNICATION SYSTEMS • *J. Ragbeer, K. Desai, H. Mir Ali* • Dr. T. Yang ⓒ

2 • MULTIPLAYER COMPUTER GAME • *A. Wafaei, N. Ali* • Dr. T. Yang Ⓢ

3 • SOLID STATE DC/DC CONVERTER USING DUAL-ACTIVE BRIDGE • *P. Mehta, A. Al-Darraji, D. Dave* • Dr. Xu ⓟ

4 • SDR BASED EMERGENCY WARNING BROADCAST GENERATOR FOR EMERGENCY VEHICLES • *G. Higgins, A. Zoudeh, S. Fels-Leung* • Dr. Zeytinoglu ⓒ

5 • HDL IMPLEMENTATION OF AN IEEE 754 SINGLE PRECISION FP UNIT ON A XILINX ZYNQ-7010 SOC • *J. Williams, M. Dolan, M. Taracha* • Dr. Ye ⓜ

6 • BIDIRECTIONAL SWITCHED MODE POWER AMPLIFIER • *A. Al-Ansari, O. Aluya, P. Landingin* • Dr. Yazdani ⓟ

7 • SMART HOME DASHBOARD FOR IOT • *O. Shukrullah, R. Sikder, A. Roy* • Dr. Jaseemuddin ⓜ

8 • FACE TRACKING FOR AUTOMATED SECURITY • *G. Seif, A. Pourali, V. Belavejian* • Dr. Raahemifar ⓒ

9 • LANGUAGE MAPPING AND PATTERN CLASSIFICATION • *S. Delong, H. Parameswaran, M. Weiser* • Dr. McConville Ⓢ

ENG 413

1 • CMOS CHIPSET FOR MULTI-GBPS SERIAL DATA LINKS • *M. Zhu, Y. Karaziakos, I. Aljanabi* • Dr. Yuan ⓜ

2 • AUTOMATIC VEHICLE RECOGNITION • *S. Yogeswaran, N. Pesic* • Dr. Alirezaie Ⓢ

3 • SMART PAD FOR INFANT/TODDLER CAR SEAT AND STROLLERS • *M. Shiwram, K. Dennis, K. Luthra* • Dr. Umapathy Ⓑ

4 • SMART PARKING • *S. Yee, D. Zaman, P. Papp* • Dr. Jaseemuddin Ⓢ

5 • LTE SYSTEM-LEVEL SIMULATOR AND QUALITY OF SERVICE METER • *A. Basnet, D. Pezdirc, F. Mufrad* • Dr. Anpalagan ⓒ

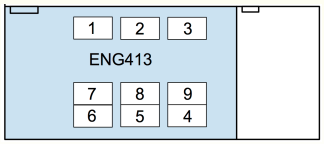
6 • PEDAL POWERED HEALTHY HOME • *S. Chidiac, A. Toor, N. Sidhu* • Dr. McConville Ⓑ

7 • SENSOR NETWORK APPLICATIONS IN A SMART BUILDING • *A. Cifuentes, E. Chu, A. Villacci* • Dr. Jaseemuddin ⓒ

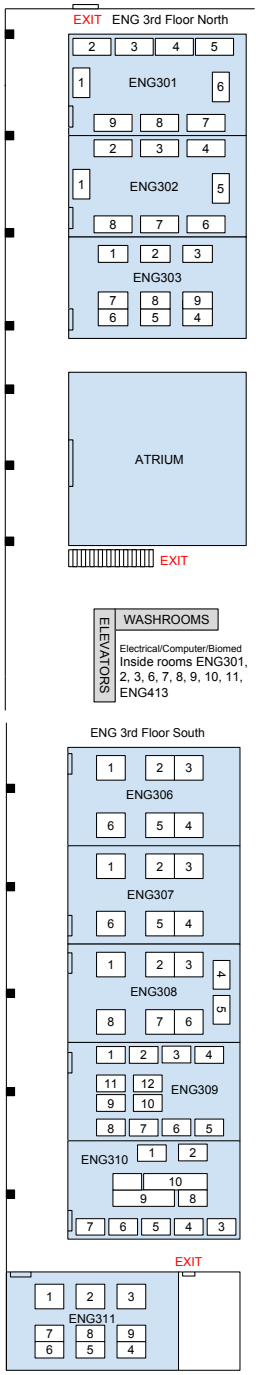
8 • TREMOR DATA-LOGGER FOR PARKINSON'S DISEASE PATIENTS • *S. Khayyer, H. Azima, S. Delavarkhan* • Dr. Umapathy Ⓑ

9 • ACCELERATION PROFILE MAPPING OF MOBILE PLATFORMS AND BIOFEED-BACK DISPLAY • *B. Dias, T. Jadidian, B. Dagys* • Dr. McConville Ⓑ

ENG 413 MAP



ENG 3RD FLOOR MAP



Ryerson University

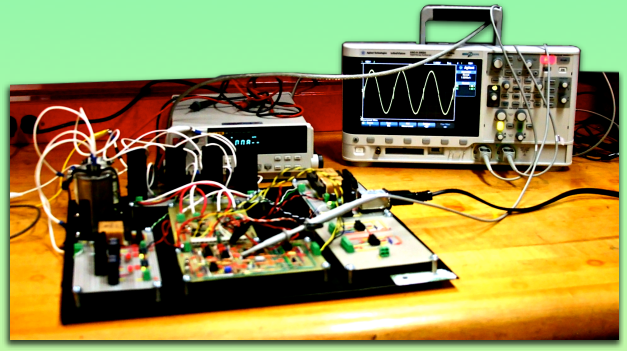
DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

RYERSON ENGINEERING DAY 2016

1:00 – 5:00PM · APRIL 29TH, 2016

3RD & 4TH FLOOR · 245 CHURCH ST.

ELECTRICAL, COMPUTER AND BIOMEDICAL ENGINEERING CAPSTONE DESIGN PROJECTS



THE PROJECTS ARE LISTED BY ROOM NUMBER AND INCLUDE: THE BENCH NUMBER, PROJECT TITLE, STUDENT NAMES, THE FACULTY SUPERVISOR AND THE PROJECT CATEGORY (SEE LEGEND BELOW).

CONSULT THE BUILDING FLOORPLAN, FOUND ON THE BACK OF THIS GUIDE, TO LOCATE A SPECIFIC BENCH IN THE ROOM.

PROJECT CATEGORY LEGEND

Ⓑ BIOMEDICAL ⓒ COMMUNICATION ⓜ COMPUTER/MICROSYSTEMS
ⓟ POWER Ⓡ ROBOTICS Ⓢ SOFTWARE

ENG 301

1 • FLEX-MATERIAL POLYMER BASED 3D PRINTER • *N. Nguyen, M.K. Fernandez, K.T. Poon* • Dr. V. Yang Ⓑ

2 • INTELLIGENT HOME STATUS MONITORING SYSTEM • *T. Ma, V. Kositwiwat, D. Koucoulas* • Dr. Raahemifar ⓒ

3 • INTEGRATED INTER-HOSPITAL TRANSFER AND COMMUNICATION APP • *A. Khan, A. Hassan, D. Patel* • Dr. V. Yang Ⓑ

4 • SMARTLOCK • *T. Hamid, Z. Samit, M.U. Shakeel* • Dr. Mohammadi ⓜ

5 • SMART HOME WIRELESS MONITOR AND CONTROL • *A. Rahman, H. Rafique, F. Alam* • Dr. Anpalagan ⓜ

6 • HOME AUTOMATION CONTROL AND INTEGRATION • *P. Feldman, M. Karrosnezh, K. Vahidifard* • Dr. Raahemifar ⓜ

7 • 3D SCANNER • *J. Nguyen, B. Pabla, J. Huy* • Dr. Raahemifar ⓜ

8 • SMART PV SYSTEMS • *M. Jessa, B. Prajapati, A. Hussain* • Dr. Raahemifar Ⓟ

9 • TILT METERING • *S. Shen, A. Banbur, W. Wysocki* • Dr. Raahemifar ⓒ

ENG 302

1 • PIANOBOT (UNIVERSAL ELECTRONIC PIANO PLAYER) • *S. Panahandeh, B. Grady, G. Licenji* • Dr. Kassam ⓒ

2 • ACCESS CONTROL FOR GRADE MANAGEMENT SYSTEM • *K. Deoram, A. Warriach, M. Chang* • Dr. T. Yang Ⓢ

3 • NEUROSURGICAL DRILL TRAINING SYSTEM V3.0 • *D. D'Souza, T. Sentsho, J. Makanjuola* • Dr. V. Yang Ⓑ

4 • SMARTDISPATCH • *C. Du, S. Kolappan, M. Zara* • Dr. V. Yang Ⓑ

5 • NUCLEAR POWER PLANT CONTROL SYSTEM WITH AVR AND PSS • *A. Khalid, F. Mohammad, A. Ullah* • Dr. Cheung Ⓟ

6 • NUCLEAR HEAT TRANSPORT SYSTEM • *K. Krishnamoorthy, B. Abbas, T. Thavathurai* • Dr. Cheung Ⓟ

7 • E-VOTING • *J. Thevarajah, L. Subamany, M. Ibanez* • Dr. T. Yang Ⓢ

8 • IMAGE ENCRYPTION BASED ON BLOCK CIPHERS • *R. Cashman, T. Yun, M. Hassan* • Dr. T. Yang Ⓢ

ENG 303

1 • SOLAR INDUCTION COOKER • *S. Amari, A. Alamodi, N. Beremad* • Dr. Karim Ⓟ

2 • SOMATOSENSORY EVOKED POTENTIAL (SSEP) AND ELECTROMYOGRAPHY (EMG) FOR WIRELESS MONITORING OF SPINAL CORD INTEGRITY • *A. Marques, G. Nahal, R. Reyes* • Dr. V. Yang Ⓑ

3 • INVENTORY MANAGEMENT SYSTEM • *D. Shah, K. Janke, G. Cusmano* • Dr. Alirezaie Ⓢ

4 • PATHOLOGICAL VOICE ASSESSOR • *S. Molani, M. Hotradat, A. Niri* • Dr. Umapathy Ⓑ

5 • SIGN-TO-SPEECH TRANSLATOR • *R. Lan Chung Yang, C-Y. Po, A. Leung* • Dr. Zeytinoglu ⓒ

6 • INTEGRATED REMOTE POWER SYSTEM MONITOR • *H. Patel, M. Tang, V. Savla* • Dr. Anpalagan Ⓟ

7 • SOLAR DC-AC 120VAC, 50HZ INVERTER POWER SUPPLY • *B. Omotayo, G. Zhou, M. Taha* Ⓟ

ENG 303 CONTINUED...

8 • WIRELESS POWER TRANSFER • *M. Omar, E. Francois-Kumaza, M. Ahmed* • Dr. Awadallah Ⓟ

9 • CORROSION PROTECTION DC-DC INTELLIGENT POWER SUPPLY • *S. Taylor, A. Rolko, A. Alfonso* • Dr. Ye Ⓟ

ENG 306

1 • SMART CONTROL CIRCUIT FOR AN ELECTRICALLY-HEATED CATALYTIC CONVERTER • *V. Patel, K. Chavda, I. Yussuff* • Dr. Yazdani Ⓟ

2 • PV ARRAY TESTING– SYSTEM AND PERFORMANCE • *T. Rajeswaran, A. Ramdan, A. Navaratnam* • Dr. Raahemifar Ⓟ

3 • LOW LATENCY DATA AGGREGATING SENTIMENT ESTIMATING FINANCIAL TREND ANALYZER • *A. Kablar, V. D'ettore, A. Checca* • Dr. Jaseemuddin Ⓢ

4 • AUTOMATION OF A CONTINUOUS FLOW BIOREACTOR FOR CARTILAGE TISSUE ENGINEERING • *F. Alhowaidi, S. Alsaad, Z. Almustafa* • Dr. Waldman Ⓑ

5 • STOCHASTIC RESONANCE DEVICE TO MECHANICALLY STIMULATE CARTILAGE CELLS • *T. Yan, P. Pietrzyk, B. Hoang* • Dr. Waldman Ⓑ

6 • EVALUATING MAGNESIUM AS A BIODEGRADABLE IMPLANTATION AND FIXATION DEVICE • *R. Rezaee* • Dr. McConville Ⓑ

ENG 307

1 • SMART MODEL TRAIN COMMUNICATION AND CONTROL SYSTEM • *S. LaBrier, K. T. Luu, L. Khachatryan* • Dr. Kassam ⓜ

2 • SMART SOCKET • *A. Chowdhury, M. Surati, M. Hammad* • Dr. Yazdani Ⓟ

3 • HIGH EFFICIENCY AC/DC CONVERTER FOR LVDC DISTRIBUTION SYSTEM • *Z.B. Liu, H.Q. Wang, G. Sumabat* • Dr. Xu Ⓟ

4 • MPPT SOLAR PANEL SMART BATTERY MANAGEMENT • *M. Abdul Karim, A. Akhavan Rad, D. Ali* • Dr. Ye Ⓟ

5 • POSITION FREE WIRELESS POWER TRANSFER • *S. Kaler, D. Ospina, M. Ahluwalia* • Dr. Yuan Ⓟ

6 • SMART BUILDING HEAT DISTRIBUTION SYSTEM • *K. Bollers, S. Dharamshi, O. Dysangco* • Dr. Anpalagan ⓜ

ENG 308

1 • SOLAR POWERED DC-AC INVERTER FOR VARIABLE SPEED CONTROL • *O. Sattaur, D. Thevakumar, A. Sreenath* • Dr. Mohammadi Ⓟ

2 • HIGH EFFICIENCY WIRELESS POWER TRANSMISSION • *R. Ferraz, M. Basara, R. Sebaaly* • Dr. Yuan ⓜ

3 • SMART WEARABLE PROXIMITY TRACKER • *J. Trieu, M. Lum, D. Vong* • Dr. Raahemifar ⓒ

4 • SIMPLE MIND CONTROLLED WHEELCHAIR CONCEPT • *D. Sharma, H. Hussain, T. Campbell-Davis* • Dr. Alirezaie Ⓢ

5 • DERMATOLOGICAL TOOL FOR AUTOMATICALLY IDENTIFYING SKIN REACTIONS AND TREATMENT RECOMMENDATIONS • *E. Evite, M. Fallarco* • Dr. Grant Ⓑ

6 • SOLAR DC-AC 110V, 60HZ / 220V, 50HZ POWER SUPPLY • *Z. Ouambo, D. Elma* • Dr. Karim Ⓟ

7 • INTELLIGENT BATTERY CHARGER FOR ELECTRIC VEHICLES • *A. Vivar-Rodriguez, Y. Egbeyemi, E.M. Francis* • Dr. Xu Ⓟ

8 • PROGRAMMABLE AC/DC POWER SUPPLY USING HIGH VOLTAGE CLASS D AUDIO AMPLIFER • *G. Tatel, F. Guttridge* • Dr. Xu Ⓟ

ENG 309

1 • POWER SYSTEM MULTI-TRIGGERED DIGITAL FAULT RECORDER • *S. Sabetian, H. Lin, X. Zhao* • Dr. Zeytinoglu Ⓟ

2 • INTELLIGENT BIDDING • *A. Mahendran, G. Jhandi, E. Oppong* • Dr. Raahemifar Ⓢ

3 • INTELLIGENT SPECIAL EFFECT INTEGRATION SYSTEM • *J.H. Santos, O. Oraham* • Dr. Guan Ⓢ

4 • ANDROID LASER POINTER • *A. Vyas, A. Zinzuwadia, I. Mohamed* • Dr. Jaseemuddin Ⓢ

5 • SMART CAR FOR INTELLIGENT TRANSPORTATION NETWORK • *V. Gajjala, D. Shanmugadasan, A. Khaja* • Dr. Jaseemuddin ⓒ

6 • MOBILE AUGMENTED REALITY SYSTEM • *E. Ankrah, S. Golabian, H. Goulbow* • Dr. Guan Ⓢ

7 • FAULT CURRENT LIMITER (FCL) • *D. Murray, M. Zhang, A. Sadat* • Dr. Yazdani Ⓟ

8 • ANFIS DESIGN FOR DISTANCE PROTECTION RELAYING WITH DISTRIBUTION EMBEDDED GENERATION • *D. Irani, T. Tasic* Ⓟ

9 • SMART MUSCLE RELAXER • *S. Khalidy, R. Anna Roy, N. Mohammed* • Dr. Umapathy Ⓑ

10 • EMBODIED VIBROTACTILE HAPTIC FEEDBACK FOR POSTURE CORRECTION • *D. Arora, P. Pandya, I. Shaukat* • Dr. Grant Ⓑ

11 • STRESS MONITORING AND QUANTIFICATION SYSTEM • *F. Alhumaid, N. Arezza* • Dr. Umapathy Ⓑ

12 • DISEASE CLASSIFICATION SYSTEM USING CAT SCAN IMAGE CAPTURE • *R. Sivaharan, B. Kapadia, M. Adam* • Dr. Grant Ⓑ

ENG 310

1 • SKIN INJURY CLASSIFICATION • *S. Prabhu, P. Fathi, U. Trivedi* • Dr. Grant Ⓑ

2 • SMART TEMPERATURE & HUMIDITY MONITORING SYSTEM • *M. Tran, C. Chan, R. Hossain* • Dr. Mohammadi ⓒ

3 • GPS GUIDED QUADCOPTER • *S. Brhing, B. Khan, N. Talwar* • Dr. Zeytinoglu Ⓡ

4 • NUCLEAR TURBINE CONTROL SYSTEM • *H. Ur-Rehman, D. Lochand, S. Afroze* • Dr. Cheung Ⓟ

5 • DESIGN OF NUCLEAR GENERATING STATION ELECTRIC SERVICE SYSTEM • *T. Pham, S. Yusuf, I. Amoh* • Dr. Cheung Ⓟ

6 • VIDEO-GUIDANCE SYSTEM FOR AUTOMATED QUADCOPTER DRONE FLIGHT CONTROL • *O. Belhenniche, E. Quan* • Dr. Kirischian Ⓡ

7 • PARALLEL COMPUTER FOR DATA MINING USING MPI • *D. Krishnakumar, M. Stedman, P. Devaraj* • Dr. Mekhiel Ⓢ

8 • SMART BUILDING MANAGEMENT SYSTEM • *C. Downey, Z. Ur-Rehman, M. Chowdhury* • Dr. Mohammadi ⓒ

9 • INTEGRATED PASSIVE WIRELESS TEMPERATURE SENSOR • *Z. Ahmed, J. Genove, O. Ahmad* • Dr. Yuan ⓜ

10 • PARALLEL COMPUTER FOR MULTIMEDIA AND ANIMATION INCLUDING GAMES USING MPI OR OPENMP • *S. Jeeva, M. Orechnikov, E. Ezechukwu* • Dr. Mekhiel Ⓢ