Participants of Research Colloquium for Science Undergraduate Students

2025-26

Name	Curriculum	Year	Project Title	Supervisor
Brandon Julio Hadisaputro	BSc (4)	4	The Global Burden of High-BMI in Female Cancers (1990-2050) and Transcriptomic Signatures of Adipocyte-Tumor Crosstalk in Advanced Ovarian Cancer	Prof Wong Alice Sze Tsai, School of Biological Sciences
Cheung Cheuk Hin Alvin	BSc (4)	4	Analysis and solutions to HKU elevator queuing problems	Dr Choi T K Olivia, SCDS (Department of Statistics and Actuarial Science)
Choi Meng Wai	BSc (4)	4	Identification and Characterization of Protective Factors in Ocular Motor Neurons Conferring Resistance in Spinal Muscular Atrophy	Prof Cheung Martin Chi Hang, School of Biomedical Sciences
Fok Po Hin	BASc(AppliedAI) (4)	4	Parameter-Efficient Fine-Tuning for Medical Image Classification Under Realistic Clinical Constraints	Prof Qu Liangqiong, SCDS (Department of AI & Data Science)
Ho Kai Wing	BSc (4)	4	Total synthesis of Paticulate Methane Monooxygenase subunit B (pmoB)	Prof Li Xuechen, Department of Chemistry
Hui Wing Hei	BSc (4)	4	Study of Metasilicate Concentration in Hong Kong Groundwater Derived from Completely Decomposed Granite and Tuff	Prof Jiao Jimmy Jiujiu, Department of Earth and Planetary Sciences
Ke Wenjun	BSc (4)	4	Generation, Detection, and Applications of Bright Squeezed Vacuum	Prof Yang Yi, Department of Physics
Khan Danish	BSc (4)	4	From inhibitors to degraders: practical design rules and validation strategies for kinase-targeting PROTACs in non-small cell lung cancer (NSCLC)	Prof Julian Tanner, School of Biomedical Sciences
Lin Ho Ming	BSc (4)	4	Species boundaries and island colonisation in Lesser Sunda bronzeback snakes (Dendrelaphis inornatus and D. timorensis)	Professor Merilä Juha, School of Biological Sciences
Liu Zhonglin	BSc (4)	4	From Inference to Intelligent Control: Applications of Probabilistic Boolean Networks in Systems Biology	Prof Ching Wai Ki, Department of Mathematics
Lobo Sean Paul Bagabaldo	BSc (4)	4	Investigating the risks of titanium dioxide as endocrine disruptors on mammalian model reproduction systems	Dr Yuen Bun Ho Bonny, School of Biomedical Sciences
Lu Yanyu	BSc(ActuarSc) (4)	3	Competitive Insurance Pricing with Adverse Selection	Prof Tim J. Boonen, SCDS (Department of Statistics and Actuarial Science)
Lyu Xinke	BSc (4)	4	Sliced Wasserstein Distance for Scalable Bidirectional DeepParticle Methods	Prof Zhang Zhiwen, Department of Mathematics
Peng Qi	BSc (4)	4	From Adam to NAMO: Matrix-Structured Gradient Optimization	Prof Lai Lexiao, Department of Mathematics
Qiu Jiongcen	BSc (4)	4	Spectral Sequence and Hyperderived Functors	Prof Chan Kei Yuen, Department of Mathematics
Saleem Yusra	BSc (4)	4	Characterisation of the R10 9 Aptamer–Asprosin Interaction for an Electrochemical Biosensor in Early Pancreatic Cancer Diagnosis	Prof Julian Tanner, School of Biomedical Sciences
Tsang Hin Lam	BSc&MRes (4)	4	Identifying Microbial Metabolites that Suppress Neurodegeneration in C. elegans	Prof Zheng Chaogu, School of Biological Sciences
Wan Yuheng	BSc (4)	3	The Evolution of Hodge Structures: Mixedness, Variations, and Saito's Formalism	Prof Mok Ngaiming, Department of Mathematics
Wei Yumeng	BSc (4)	4	Deep-sea Ostracods Faunal Turnover in the Southern Ocean During the Eocene-Oligocene Transition	Prof Moriaki Yasuhara & Prof Schunter Celia, School of Biological Sciences

Wong Hoi Yat	BSc (4)	4	Dual Formulation for a Regime-Switching Optimal Stopping Investment Problem	Prof. W. Li, SCDS (Department of Statistics and Actuarial Science)
Wong Nok Him	BSc (4)	4	X-ray cooling flows in Galaxy Clusters	Prof Lim Jeremy Jin Leong, Department of Physics
Xiao Suyang	BSc (4)	3	Error Bounds for Model Merging in the Wasserstein Space	Prof Suzuki Atsushi, Department of Mathematics
Xu Meishan	BSc (4)	4	Triangular Dependence Modeling for HK Rainfall Data	Prof Marius Hofert, SCDS (Department of Statistics and Actuarial Science)
Xuan Jiayi	BSc(ActuarSc) (4)	3	Kernel Estimation of Conditional Average Treatment Effect, and is Modified by Data Sharpening Method	Prof Lee Stephen Man Sing, SCDS (Department of Statistics and Actuarial Science)
Yang Enle	BSc (4)	5	A Differential Evolution Approach to Magnification Anomalies in iPTF16geu	Prof Lim Jeremy Jin Leong, Department of Physics
Yang Ian Stanley Ang	BSc (4)	4	Forensic Kinship Analysis Using Bioinformatics on Low-Quality DNA Sequencing Data of Aquilaria sinensis	Prof Merilä Juha, School of Biological Sciences
Zhang Tung Yuk	BSc (4)	4	Investigating the Oncogenic Role of STRAP in Breast Cancer	Prof Cheung Martin Chi Hang, School of Biomedical Sciences
Zhang Xuanjia	BSc (4)	4	The Monte Carlo Simulation of New Physics Discovery at the Large Hadron Collider	Prof Tu Yanjun, Department of Physics
Zheng Han	BSc (4)	4	Preconditioning Methods in Deep Learning Optimization	Prof Lai Lexiao, Department of Mathematics
Zhu Zi	BSc (4)	4	3D Numerical Constraints on the Development of Crustal-Scale Ductile Shear Zones and Implications on Neoarchean Tectonic Regimes	Prof Zhang Jian, Department of Earth and Planetary Sciences

2024-25

Name	Curriculum	Year	Project Title	Supervisor
Cheng Yu Ting	BASc(AppliedAI) (4)	2	Using Multiple Latent Layers in Stable Diffusion for Image Semantic Matching	Prof Kai Han, SCDS (Department of Statistics and Actuarial Science)
Cheuk Sim Kuen	BSc (4)	4	AgRP and POMC Neurons in Appetite and Energy Regulation	Prof Chow Kwok Chong Billy, School of Biological Sciences
Chiu Ka Long	BSc(ActuarSc) (4)	3	Dependence structures in multiple life insurances and annuities	Prof Ka Chun Cheung, SCDS (Department of Statistics & Actuarial Science)
Du Meining	BSc (4)	4	Permittivity of Oxide Enhanced by Defect Engineering	Prof F C C Ling, Department of Physics
Fong Eugenia King Hin	BSc (4)	4	The Biological Significance of The AVM Pathway in C. Elegans	Prof Chaogu Zheng, School of Biological Sciences
He Yiwei	BSc (4)	4	Quantitative Analysis of Systematic Errors in Hubble Constant Determination by Gravitational Lens Modeling	Prof Jeremy Jin Leong Lim, Department of Physics
Ho Sin Yiu	BSc (4)	4	Identification of Protective Factors in Oculomotor Neurons Conferring Resistance to Spinal Muscular Atrophy	Prof Martin C.H. Cheung, School of Biomedical Sciences
Lewis Rommulus Francis	BSc (4)	4	Gravitational Lens Modelling of an IllustrisTNG Mock Multiply Lensed Supernova	Prof Jeremy Jin Leong Lim, Department of Physics
Liu Jinhui	BSc (4)	3	Evaluating the potential of absolute abundance in human gut microbiome studies	Prof Joshua W. K. Ho & Prof Alan S L Wong, School of Biomedical Sciences
Or King Long	BSc (4)	4	Asymmetric Transformation of Active Methylene Compounds	Prof Huang Zhongxing, Department of Chemistry
Ting Wan Hei	BSc (4)	4	Cognitive Flexibility: The Relationship Between Social Learning and Innovation in Rosy-Faced Lovebirds (Agapornis roseicollis)	Prof Simon Y W Sin, School of Biological Sciences

Wang Ruyu	BSc(ActuarSc) (4)	3	Natural Hedging Between Longevity and Mortality Risk	Prof Boonen Tim J., SCDS (Department of Statistics & Actuarial Science)
Wong Chi Lok	BSc (4)	4	Revealing SNAI2 as a Pseudo-Primed Substrate of GSK3	Prof Martin C.H. Cheung, School of Biomedical Sciences
Wong Chung Hin	BSc (4)	4	Pathogenesis of Emerging Respiratory Viruses using Transcriptomics	Prof Chan Chi Wai Michael, School of Public Health
Wong On Ki	BSc&MRes (4)	4	A Phylogenetic Investigation of the Emergence of Coronavirus Variants of Concern	Prof Lam Tsan Yuk Tommy, School of Public Health & Prof Simon Y W Sin, School of Biological Sciences, HKU
Wong Yat Long	BSc&MRes (4)	4	Ideal band geometry in Fractional Chern Insulator	Prof Chenjie Wang, Department of Physics
Yao Zixuan	BSc (4)	4	Data Fusion for Causal Effects Estimation	Prof Fong Chung Hang Edwin, SCDS (Department of Statistics & Actuarial Science)
Yu Xinyue	BSc (4)	3	Pontryagin Maximum Principle and Applications in Escaping Problem	Prof Wong Tak Kwong, Department of Mathematics
Zhuo Qianlin	BSc (4)	4	Investigating the Therapeutic Potential of CHL 1 in SMA Mouse Model	Prof Martin C.H. Cheung, School of Biomedical Sciences

2023-24

Name	Curriculum	Year	Project Title	Supervisor
Chan Chun Lai	BSc (4)	4	Tumor Immune Microenvironment (TIME) is Associated with the Survival Outcome and Progression in Triple Negative Breast Cancer	Prof Sugimura Rio Ryohichi, School of Biomedical Sciences
Chan Matthew	BSc (4)	4	Assembly of Polyhedral Particles via Cooperative Colloidal Interactions	Prof Wang Yufeng, Department of Chemistry
Choi Hin Hang	BSc (4)	4	Investigating the impact of alternative splicing in sleep regulation of C. elegans	Prof Zheng Chaogu, School of Biological Sciences
Feng Yushi	BSc (4)	4	Generative Pre-trained Models as Context-Driven Graph Data Augmenter	Prof Yu Lequan, Department of Statistics and Actuarial Science
Han Kang Ding	BSc (4)	0	Photocatalytic Degradation of Microplastics via Nb2O5 Nanostructures	Prof Aleksandra Djurišić, Department of Physics
Kan Cheuk Kwan	BSc (4)	4	Simulating Accretion Disks and Jets Around Prograde and Retrograde Black Holes	Prof Dai Lixin Jane, Department of Physics
Lee Sze Yuen	BSc (4)	4	Function of FANCM in repairing replication stress-induced DNA breaks	Prof Chan Ying Wai Gary, School of Biological Sciences
Leung Chi Ho	BSc (4)	4	Effect of stream water quality on the thermal tolerance of freshwater dwarf shrimp Caridina cantonensis	Prof Timothy Bonebrake, School of Biological Sciences
Leung Chun Terence	BSc (4)	4	Investigating Magma Eruption Dynamics using Melt Inclusion and Host Mineral Composition	Prof Li Weiran, Department of Earth Sciences
Leung Ho Chi	BSc (4)	4	Desymmetric Synthesis of 4,4'-Bis(oxazoline) Ligands and their Applications	Prof Huang Zhongxing, Department of Chemistry
Leung Sin Ying	BSc (4)	4	Study of the effect of H3K79me2-Menin interaction on the regulation of alternative splicing	Prof Wong Jason Wing Hon, School of Biomedical Sciences
Li Kau Chun	BSc (4)	4	Drug Target Identification via Energy Transfer	Prof Che Chi Ming, Department of Chemistry

Li Wai Lam Verna	BSc (4)	4	Study of how GEN1 endonuclease limits cGAS activation and suppresses innate immune response	Prof Chan Ying Wai Gary, School of Biological Sciences
Lu Yudi	BSc (4)	3	Target Identification of Traditional Chinese Medicine	Prof Li Xiaoyu, Department of Chemistry
Luo Yongqi	BSc (4)	4	Elucidating the Interplay Between Macrophages and Brain Microvascular Endothelial Cells During Systemic Inflammation	Prof Chang Raymond Chuen Chung, School of Biomedical Sciences
Mok Yun Kam	BSc (4)	4	Atroposelective Synthesis of Axially Chiral Biaryl Aldehydes via Reductive Desymmetrization	Prof Huang Zhongxing, Department of Chemistry
Qian Yunzhi	BSc (4)	4	Optogenetic Control of Myosin-X Dimerization Using LOV Domain: A Spatiotemporal Approach to Investigate Filopodia Formation	Prof Johnson Heath Ellis, School of Biological Sciences
Rho Yerim	BSc (4)	4	Identifying context-specific housekeeping genes (CSHKGs) in Touchstone Expression Dataset	Prof Shih Jen Hao David, School of Biomedical Sciences
Sha Taole	BSc (4)	4	Residuals Scaling for Bootstrap Prediction Interval in Regression	Prof Stephen Lee, Department of Statistics and Actuarial Science
Wang Ziyu	BSc (4)	4	Investigating machine learning methods for survival prediction with an application to TCGA breast cancer data	Prof Gu Yu, Department of Statistics and Actuarial Science
Wong Ho Cheong	BSc (4)	4	Offshore buried paleochannels and their influences on groundwater and seawater exchange in the Pearl River Estuary	Prof Jiao Jimmy Jiujiu, Department of Earth Sciences
Wu Jiaxin	BASc(AppliedAI) (4)	4	Uncertainty Estimation of Large Language Models in Medical Question Answering	Prof Yu Yizhou, Department of Computer Science
Wu Yonglin	BSc (4)	4	The assembly pathway of a conserved kinase-kinesin complex in regulating motile cilia function	Prof He Mu, School of Biomedical Sciences
Xiao Ziyan	BASc(AppliedAI) (4)	4	Multi-Modal Representation Learning and its Application in Healthcare: Applying Deep Residual Shrinkage Network in Detecting Sleep Apnea Based on BCG signals	Prof Yu Lequan, Department of Statistics and Actuarial Science
Xue Luhao	BSc (4)	4	Galerkin Proper Orthogonal Decomposition Methods for Differential Equations	Prof Zhang Zhiwen, Department of Mathematics
Yao Yuanyue	BSc (4)	3	Assessing Chemical Weathering Processes in Dominica	Prof McKenzie Ryan, Department of Earth Sciences
Ye Gi Choi	BSc (4)	3	Investigating the Effect of Novel MRGPRX2 Antagonistin Inhibiting LL-37 Induced Rosacea	Prof Chow Kwok Chong Billy, School of Biological Sciences
Yee Pak On Patrick	BSc (4)	4	Effects of DNMT3a and taVNS regulation in middle-aged animal model	Prof Fung Man Lung & Prof. Chang Chuen Chung Raymond, School of Biomedical Sciences
Yu Xinyue	BSc (4)	4	Safety pharmacology of potential heavy metal detoxifying agent	Prof Chow Kwok Chong Billy, School of Biological Sciences
Zhang Xinyuan	BSc (4)	4	From Fisher to K-FAC: Navigating Optimization in Foundation Models	Prof Yuan Xiaoming, Department of Mathematics
Zhou Polly	BSc (4)	4	TME Lego: assembloid modeling solid tumor microenvironment	Prof Sugimura Rio Ryohichi, School of Biomedical Sciences

2022-23

Name	Curriculum	Year	Project Title	Supervisor
Chan Xiao Jun	BSc (4)	4	Applying machine learning algorithms to enhance wildfire prediction in Alaska	Dr Jin Wu, School of Biological Sciences

Cheung Ka Hin	BSc (4)	4	Strategies and Challenges on Nucleus Pulposus Differentiation relevant to Intervertebral Disc Degeneration	Prof Cheah Kathryn Song Eng, School of Biomedical Sciences
Chong Wing Lam	BSc (4)	4	Molecular Mechanism of How Phosphorylated PLK1 Interacts with PICH-BTRR Complex on UFBs	Dr Gary Ying Wai Chan, School of Biological Sciences
Chow Cheuk Ying Tweety	BSc (4)	4	Modelling Pathogenesis of Craniofacial Disorders using Patient-specific Urine-derived Stem Cells	Dr Martin C.H. Cheung, School of Biomedical Sciences
Djan Matthew	BSc (4)	4	Development and characterization of ID8 Trp53-/- cell line for improved murine model of HGSOC	Prof Alice S. T. Wong, School of Biological Sciences
Feng Yueman	BSc (4)	5	Multidimensional Pair Trading in China's Stock Market	Dr Chen Wang, Department of Statistics & Actuarial Science
Kang Liang	BSc (4)	4	Investigating the Structural Basis of Human Chromosome Replication and Epigenetic Inheritance by Using Cryo-EM	Dr Zhai Yuanliang, School of Biological Sciences
Lam Lok To Cherry	BSc (4)	5	Understanding the Genetic Factors Underlying Clinical Heterogeneity of Patients Suffering From Systemic Lupus Erythematosus	Professor Wanling Yang, Department of Paediatrics and Adolescent Medicine Dr Chaogu Zheng, School of Biological Sciences
Leung Hing Lam	BSc (4)	4	Effect of temperature on the foraging behaviour of Solenopsis invicta (Hymenoptera: Formicidae)	Dr. Benoit Guénard, School of Biological Sciences
Li Hon Lam	BSc (4)	4	Self Supervised Visual Prompt Learning	Dr Kai Han, Department of Statistics & Actuarial Science
Liu Yiming	BSc (4)	4	Apply a New Approach to Cluster Algebra	Prof Lu Jianghua, Department of Mathematics
Massey Peter	BSc (4)	0	Light on Dark Matter: Anomalies in Gravitational Lensing	Dr Jeremy Jin Leong Lim, Department of Physics
Pang Wing Kwan	BSc(ActuarSc) (4)	4	Multi-task machine learning for joint diagnosis and prognosis of human cancers	Dr Yu Lequan, Department of Statistics & Actuarial Science
Sun Zounachuan	BSc (4)	4	Population, vegetation, and heat hazard in high-density urban: Socio-ecological drivers of inequitable extreme heat experienced in Hong Kong neighborhoods	Dr Chao Ren, Department of Earth Sciences
Wang Nan	BSc (4)	3	Investigating the Effectiveness of Organoids-Based Chimeric Antigen Receptor Macrophage Immunotherapy against Hepatocellular Carcinoma	Dr Sugimura Rio Ryohichi, School of Biomedical Sciences
Wong Clara Shania	BSc (4)	4	Unbiased Selection of DNA-Encoded Libraries on Live Cells	Prof Li, Xiaoyu, Department of Chemistry
Yun Ze	BSc (4)	4	Finiteness of Mordell-Weil Groups of Elliptic Modular Surfaces	Prof Ngaiming Mok, Department of Mathematics
Zhang Hongzhuo	BSc (4)	4	Investigating Measles Virus DI-RNA as a Potential Vaccine Adjuvant	Prof Jin Dong-Yan, School of Biomedical Sciences

2021-22

Name	Curriculum	Year	Project Title	Supervisor
Chan Chin Tung	BSc (4)	4	Adaptations of Desmos chinensis (Annonaceae) fruits for promoting spatial and temporal separation of seedling	Prof Richard Saunders, School of Biological Sciences
Chan Ching Si	BSc (4)	4	Within and trans-generational phenotypic plasticity of freshwater ectotherm Pomacea canaliculata in response to thermal stress	Dr Juan Diego Gaitán-Espitia, School of Biological Sciences
Chan Pak Hop	BSc(ActuarSc) (4)	4	The Littlewood-Offord Problem and Invertibility of Random Matrices	Prof Jeff J Yao, Department of Statistics & Actuarial Science

DJAN Matthew	BSc (4)	3	Investigating the Mis-splicing Phenomena of Genes on Exon-Exon Junctions and V5-TAG	Professor Dong-Yan Jin, School of Biomedical Sciences
Du Liheng	BSc (4)	3	High dimensional two sample significance test with the same Wishart Matrix	Prof Jeff J Yao, Department of Statistics & Actuarial Science
Garg Anahita	BSc (4)	4	Potential roles and interaction of antioxidants and omega fats in plants and humans	Dr Jetty C Y Lee; Dr Olivier Habimana, School of Biological Sciences
Karim Kazi Neha	BSc (4)	4	Molecular cloning, tissue distribution and functional studies of phoenixin in fish model	Prof Anderson O L Wong, School of Biological Sciences
Li Lok Ka	BSc (4)	4	Relationship between AMPK-dependent BDNF pathway and KLF15 on fatty acid oxidation in skeletal muscle	Dr Chi Bun Chan, School of Biological Sciences
Liu Xinqi	BSc (4)	4	The role of extracellular NAD on the immune microenvironment of Hepatocellular Carcinoma	Prof Jiandong Huang; Dr Carmen C L Wong, School of Biomedical Sciences; Department of Pathology
Mia Md Bayezid	BSc (4)	4	GEN1 in processing recombination and replication intermediates	Dr Gary Y W Chan, School of Biological Sciences
Ouyang Xiangyu	BSc (4)	4	Regulation of Spire1 by Phosphoinositides and PARP in DNA Damage Response	Prof Michael S Y Huen, School of Biomedical Sciences
Poon Yu Ching	BSc (4)	4	Defining the development path of innate immune cells from human pluripotent stem cells	Dr Rio Sugimura; Dr Jiangwen Zhang, School of Biomedical Sciences, School of Biological Sciences
Shah Aashana Chetan	BSc (4)	4	Quantifying the Metastatic Propensity of Cancer Cells that Undergo Peritoneal Metastasis as a process	Prof Alice S T Wong, School of Biological Sciences
Singhal Kush	BSc (4)	4	Frieze Patterns arising from Dynkin Diagrams	Prof Jianghua Lu, Department of Mathematics
Siu Tsz Ho	BSc (4)	4	Development of Chemiluminescent Probes for Detecting Reactive Oxygen Species	Prof Dan Yang, Department of Chemistry
Song Menghan	BSc (4)	4	Computation of quantum entanglement in quantum magnetism via Monte Carlo simulations	Dr Zi Yang Meng, Department of Physics
Tan Tixuan	BSc (4)	3	Anomalous Bloch Oscillation and Electrical Switching of Edge Magnetization in Bilayer Graphene Nanoribbon	Prof Wang Yao, Department of Physics
Tang Tze Tung	BSc (4)	4	Characterisation of Mitochondrial Proteome Changes during SARS-CoV-2 ORF9b Expression by Rapid Immunopurification	Prof Dong-Yan Jin, School of Biomedical Sciences
Tsang King Wai	BSc (4)	3	Deep learning-based behaviour analysis: Odour and colour as cues for foraging in Rosy-faced lovebirds (*Agapornis roseicollis*)	Dr Simon Sin, School of Biological Sciences
Tse Ki Chun	BSc (4)	4	Automatic recognition of weathered rock images by convolutional neural networks	Dr Louis Wong, Department of Earth Sciences
Wang Junshi	BSc (4)	2	Semi-supervised Learning Based on Nadaraya-Watson Estimator	Prof Stephen Lee, Department of Statistics & Actuarial Science
Wang Zihan	BSc (4)	4	A Two-tier Process of Planar Cell Polarity Development Suggested by Ising-based Modeling	Prof Jiandong Huang, School of Biomedical Sciences
Wong Kwan Yuen	BSc (4)	4	Anticancer Gold (III) Pincer Complexes Containing N-Heterocyclic Carbene Ligands	Prof Chi Ming Che, Department of Chemistry
XIN Jiayi	BASc(AppliedAI)	2	Using artificial intelligence (AI) to turn a mobile smartphone into a stethoscope	Dr Joshua W. K. Ho, School of Biomedical Sciences

Xu Xinshu	BSc (4)	4	Characterization of sPDZD2-GPR161 interaction in the negative regulation of Hedgehog signaling	Dr Kwok Ming Yao, School of Biomedical Sciences
Ying Yui Wang	BSc (4)	4	Meteorological drivers of wildfire risk in Hong Kong under Future climate Change	Dr Jed Oliver Kaplan, Department of Earth Sciences
Yip Ming Tsun	BSc (4)	4	Elucidating the role of a mitochondrial protein - Mmd2 in neuron-glial fate choice determination in the dorsal root ganglia	Dr Martin Cheung, School of Biomedical Sciences
Zhang Jiahao	BSc (4)	4	An integration of weak solution with adversarial networks helps solving high-dimensional partial differential equations	Dr Zhiwen Zhang, Department of Mathematics
Zhang Maoqi	BSc (4)	4	Application of A Machine Learning Framework that accelerates the solution of ODEs and PDEs	Dr Guanglian Li, Department of Mathematics

2020-21

Name	Curriculum	Year	Project Title	Supervisor
Cai Yuxi	BSc (4)	4	Application of Deep Learning: Sentiment Analysis on COVID-19 Vaccine Tweets	Prof Guodong Li, Department of Statistics & Actuarial Science
Chan Alistair Kai Chak	BSc (4)	4	Combination therapy in nanoparticles encapsulating curcumin against Alzheimer's Disease	Dr Aviva S F Chow & Dr Dong-Yan Jin, School of Biomedical Sciences & Department Of Pharmacology And Pharmacy
Chan Lok Yin	BSc (4)	4	Total and free sugars level and the main types of sugars used in local and imported pre-packaged foods and beverages sold in Hong Kong	Dr Jimmy C Y Louie, School of Biological Sciences
Chan Timothy	BSc (4)	4	Detecting alternative promoter usage in hepatocellular carcinoma and nasopharyngeal carcinoma using 5'-biased sequencing data	Dr Joshua W K Ho, School of Biomedical Sciences
Cheung Chin Shek	BSc (4)	4	Methods in the study of intestinal microbiota: in vitro colon model and in vivo samples	Dr Hani El-Nezami, School of Biological Sciences
Du Zhixu	BSc (4)	4	Sign Language Recognition	Prof Michael K P Ng, Department of Mathematics
Fung Cheuk Ying	BSc (4)	4	Reconstructing last-century nutrient conditions off west Greenland using stable isotopes in crustose coralline algae	Dr Christelle A Not, Department of Earth Sciences
Gan Dailin	BSc (4)	4	Deep Learning with Application in Artificial Intelligence	Prof Guosheng Yin, Department of Statistics & Actuarial Science
Gupta Saumya	BSc (4)	4	Testing the effect of ocean acidification on the camouflaging behavior of sea urchin Salmacis sphaeroides	Dr Bayden Russell, School of Biological Sciences
Kim Sehong	BSc (4)	4	Unravelling the Effect of Maph-1.3 on ALM Touch Receptor Neurons of Caenorhabditis elegans	Dr Chaogu Zheng, School of Biological Sciences
Lai Wenjing	BSc (4)	4	Understanding the molecular mechanism of congenital scoliosis	Dr Bo Gao, School of Biomedical Sciences
Li Kam Yun	BSc (4)	4	Mesoporous chiral metal organic framework (CMOF) for heterogenous asymmetric photocatalyst	Dr Jian He, Department of Chemistry
Lim Hui Yuan	BSc (4)	4	Modelling Alzheimer's and Parkinson's Disease in C. Elegans	Dr Chaogu Zheng, School of Biological Sciences
Lou Yuchen	BSc (4)	3	First order algorithms for optimization problems in data science	Prof Xiaoming Yuan, Department of Mathematics
Szeto Dei Men	BSc (4)	4	Investigating the role of DLC-il and the molecular regulation of its expression in embryonic chick spinal motor neurons using CRISPR/Cas9 genome-editing approach	Dr Martin C H Cheung, School of Biomedical Sciences

Tsang Hiu Yu	BSc (4)	4	Ectoparasites of bats in Hong Kong and specificity of host-parasite interaction	Dr Simon Y W Sin, School of Biological Sciences
Tse Wing Man	BSc (4)	4	Effects of melatonin on neuropathological changes in amygdala-prefrontal cortex of 5XFAD mouse model of Alzheimer's Disease	Dr Lee Wei Lim, School of Biomedical Sciences
Wong Jolene	BSc (4)	4	Microplastic ingestion related to feeding habits of cormorants in Deep Bay	Dr Christelle A Not & Dr Caroline Dingle, Department of Earth Sciences
Wong Yeuk Hang Portia	BSc (4)	4	Tracing pangolin trade origins and revealing illegal trafficking networks through next-generation sequencing	Dr Timothy C Bonebrake, School of Biological Sciences
Yip Ka Hei Anson	BSc (4)	5	Assessing Functional Connectivity of Urban Green Spaces for Butterflies in Highly Urbanized Landscape	Dr Timothy C Bonebrake, School of Biological Sciences
Yu Nicole	BSc (4)	4	Starvation and thermal consequences for resource allocation and reproduction in a polyphenic butterfly	Dr Timothy C Bonebrake, School of Biological Sciences
Zhang Xiaotian	BSc (4)	4	Identification and Characterization of Vangl2 Interactome Using Proximity-dependent Biotinylation	Dr Bo Gao, School of Biomedical Sciences
Zhang Zheng	BSc (4)	4	The impact of COVID-19 epidemic on the conservation status of pangolins	Dr Timothy C Bonebrake, School of Biological Sciences
Zheng Yahuan	BSc(ActuarSc) (4)	4	Distribution of Zeros of a Random Polynomial	Prof Jeff Jianfeng Yao, Department of Statistics & Actuarial Science

2019-20

Name	Curriculum	Year	Project Title	Supervisor
Cheng Yujia	BSc (4)	4	Subgroup Analysis with Application to Clinical Trials	Dr Jinfeng Xu, Department of Statistics and Actuarial Science
Chiu Pak Wing	BSc (4)	4	Cooperativity of Irx3/5 with its potential partners in genome-wide transcriptional regulation during embryonic mouse inner ear development	Prof Mai Har Sham, School of Biomedical Sciences
Lam Si Yu	BSc (4)	4	Tracking Siberian Rubythroats and Yellow-breasted Buntings with Stable Isotopes	Dr Caroline Dingle, School of Biological Sciences
Lee Kwun Chak	BSc (4)	4	Potentially biogenic carbon in Wallace assemblage, Southeast Manitoba, Canada	Dr Joseph Michalski, Department of Earth Sciences
Leung Hoi Kit Matthew	BSc (4)	4	Effects of Particulate Yeast Beta-glucan on Blood Adiposity Parameters and Bile Acids Profile in HFD-fed Mice	Dr Hani El-Nezami, School of Biological Sciences
Liang Shuang	BSc (4)	4	On the L2 estimate and its application	Prof Ngai Ming Mok, Department of Mathematics
Liu Chen	BSc (4)	4	Efficient Unpaired Image Dehazing with Cyclic Perceptual-Depth Supervision	Prof Guosheng Yin, Department of Statistics and Actuarial Science
Payong Jae Elise Landayan	BSc (4)	3	Using hybrid bilayer membrane modified electrodes as a lipid layer permeation assay platform	Dr Edmund C M Tse, Department of Chemistry
Shao Xiaoman	BSc (4)	3	Investigation of DOCK7's Rolw in Melanoma Development	Dr Martin C H Cheung, School of Biomedical Sciences
Sun Xianlin	BSc(ActuarSc) (4)	4	A General Framework for Post-model selection Inference with Bootstrapping and its Applications	Prof Stephen M S Lee, Department of Statistics and Actuarial Science
Tang Xun	BSc (4)	3	Demonstration of generic Quantum controllability under QAOA setting	Dr Zhiwen Zhang, Department of Mathematics

Tao Yufeng	BSc (4)	3	Combining Technical Trading Rules: A Recurrent Reinforcement Learning Approach	Dr Philip L H Yu, Department of Statistics and Actuarial Science
Tsang Kin Ming	BSc (4)	4	Representation by weighted m-gonal numbers and weighted squares	Dr Benjamin R Kane, Department of Mathematics
Wong Hong Tsun	BSc (4)	4	Dark Energy as Torsion in General Relativity	Dr Jereny J L Lim, Department of Physics
Wong Yin Pok	BSc (4)	4	Synthesis of Luminescent Metal Complexes and their Functional Studies	Prof Vivian W W Yam, Department of Chemistry
Xiao Xinyu	BSc (4)	4	How do the thermal microcracks affect the cracking behaviour in granite under tensile loading?	Dr Louis N Y Wong, Department of Earth Sciences
Xu Hongting	BSc (4)	4	ISM1 in Murine Hematopoiesis	Prof Zhongjun Zhou, School of Biomedical Sciences
Xu Wan	BSc (4)	4	Elucidating the Role of SOX10 in Neuroblastoma	Dr Martin C H Cheung, School of Biomedical Sciences

2018-19

Name	Curriculum	Year	Project Title	Supervisor
Gu Jiacheng	BSc (4)	4	The Tumor-Suppressor Effect of the Long Non-Coding RNA RP11 in Hepatocellular Carcinoma	Dr Jiangwen Zhang, School of Biological Sciences
Han Wendi	BSc (4)	4	Spectral Ratio for Positive Matrices	Dr Guangyue Han, Department of Mathematics
Ho Sik Yin	BSc (4)	4	Optimization of guide RNA scaffold design for multiplexed gene editing	Dr Alan S L Wong, School of Biomedical Sciences
Kwan Hiu Lam Rachel	BSc (4)	4	Role of TRPC1-induced Ca^{2+}-Signaling in Neuromuscular Synapse Development	Dr Chi Wai Lee, School of Biomedical Sciences
Lai Siu Lun Michael	BSc (4)	4	Visualization of neural pathways in Parkinson's disease by transparent brain and neural tracing	Dr Raymond C C Chang, School of Biomedical Sciences
Lam Siu Ling	BSc (4)	5	Modular forms and product formulas	Dr Benjamin R Kane, Department of Mathematics
Lee Tak Wang Terence	BSc (4)	4	Influenza A virus PB1-F2 cytotoxic motif promotes self aggregation to activate NLRP3 inflammasome	Prof Dong-Yan Jin, School of Biomedical Sciences
Leung Tsz Kin Calvin	BSc (4)	4	Oviposition preference and niche partitioning in Hong Kong stag beetles (Coleoptera: Lucanidae)	Dr Timothy C Bonebrake, School of Biological Sciences
Leung Yee Man	BSc (4)	4	Evolutionary reduction in the plastome of mycoheterotrophic *Thismia hongkongensis*	Prof Richard M K Saunders, School of Biological Sciences
Ng Man Hoi	BSc (4)	4	Ion-exhange Leaching Solutions on Product Quality in Rare Earth Recovery	Prof Meifu Zhou, Department of Earth Sciences
Pei Yining	BSc (4)	4	Copulas in Risk Management	Dr Ka Chun Cheung, Department of Statistics & Actuarial Science
Shukla Yash Sanjaykumar	BSc (4)	4	Assessing the activity of an autonomous and continuous production of a function and synthetic push-pull motif	Dr Julian A Tanner, School of Biomedical Sciences
Su Zehao	BSc (4)	4	Test for Parent-of-origin Effects on the X-chromosome	Prof Tony W K Fung, Department of Statistics & Actuarial Science
Wan Lok Yee	BSc (4)	4	Preparation of recombinant protein of adiponectin in *E. coli* and testing of its bioactivity in cell lines with adiponectin receptor expression and its potential effects on promoter activation of pituitary hormones	Prof Anderson O L Wong, School of Biological Sciences

Wang Chuwen	BSc (4)	4	Uniruled Projective varieties	Prof Ngai Ming Mok, Department of Mathematics
Woo Vanessa Sin Tung	BSc (4)	3	Synthetic Studies Towards Functionalized Catenanes	Dr Ho Yu Au-Yeung, Department of Chemistry
Yeung Chun Hei	BSc (4)	4	What causes brightness "anomalies" in gravitationally lensed quasars?	Dr Jeremy J L Lim, Department of Physics
Zhao Ziwei	BSc (4)	4	Home Sweet Home ---- Territoriality of Male and Female Oriental Magpie Robin (*Copsychus saularis*) in Breeding and Non-breeding Seasons	Dr Caroline E Dingle, School of Biological Sciences

2017-18

Name	Curriculum	Year	Project Title	Supervisor
Chan Chun Ngai	BSc(4)	4	The analysis of the sediments from Huangqihai	Dr Zhonghui Liu, Department of Earth Sciences
Chan Ka Kit	BSc(4)	4	Fracture Toughness of Hong Kong Granite - Numerical Simulation based on an improved grain-based model	Dr Louis N Y Wong, Department of Earth Sciences
Chen Yuming	BSc(4)	4	Computing effective diffusivity of stochastic flows using the multilevel Monte Carlo method	Dr Zhiwen Zhang, Department of Mathematics
Cheung Man Him	BSc(4)	4	Elucidating the Role of Dlc1ß in Motor Neuron Development	Dr Martin C H Cheung, School of Biomedical Sciences
Chu Ka Chi	BSc(4)	4	Differential Gene Expression in Mouse Notochord to Nucleus Pulposus Transition	Prof Kathryn S E Cheah, School of Biomedical Sciences
Fan Kwok Lung	BSc(4)	3	Uncovering the Nature of Fermi LAT Unassociated Gamma-ray Sources	Dr Stephen C Y Ng, Department of Physics; Prof Pablo Miguel SAZ Parkinson, Department of Physics
Fung Lok Hin	BSc(4)	4	Impact of Climate Change on the Phenology of Migratory Birds in Hong Kong	Dr Timothy C Bonebrake & Dr Caroline E Dingle, Department of Earth Sciences
Gu Haotian	BSc(4)	4	Efficient Numerical methods to Solve G-equations using Proper Orthogonal Decomposition	Dr Zhiwen Zhang, Department of Mathematics
Lee Lai Yee	BSc(4)	4	The Study of Brightest Cluster Galaxy Alignment in 14 CLASH Clusters	Dr Jeremy J L Lim, Department of Physics
Ling Yuet Fung	BSc(4)	4	Upper-ocean stratification in the polar North Atlantic and its impact on deep-water ventilation during past interglacials	Dr Benoit Thibodeau, Department of Earth Sciences
Man Pui Hei Marcus	BSc(4)	4	Modulation of the cGAS-STING Pathway by MERS-CoV	Prof Dong-Yan Jin, School of Biomedical Sciences
Ng John Joson Quimpo	BSc(4)	4	A Metal-based Biomimetic Strategy for the Development of Analyte Responsive Fluorescent Probes	Dr Ho Yu Au-Yeung, Department of Chemistry
Ng Ka Wai Patrick	BSc(4)	4	Search for Heavy Higgs Bosons at ATLAS Using Machine Learning Based Methods	Dr Yanjun Tu, Department of Physics
Ng Un I	BSc(4)	4	Creating an Artificial Metalloenzyme by Metal Incorporation into a Natural Protein	Prof Chi Ming Che, Department of Chemistry
Ng Yu Hin Jay	BSc(4)	4	Microstructural investigation on Hong Kong granite - A quantitative analysis method using petrographic microscope	Dr Louis N Y Wong, Department of Earth Sciences
Poh Wei Church	BSc(4)	4	Design, Synthesis, Characterisation and Photophysical Properties of Cyclometalated Platinum(II) Complexes and Their Application Studies as Organic Resistive Memories	Prof Vivian W W Yam, Department of Chemistry

Wang Jen-chieh	BSc(4)	4	Studies on the effects of stereochemistry on (4+3) cycloaddition to synthesize perhydroazulenes	Prof Pauline Chiu, Department of Chemistry
Wang Jianian	BSc(4)	4	Filtered Historical Simulation method on Linear GARCH model	Dr Guodong Li, Department of Statistics & Actuarial Science
Wang Jingxuan	BSc(4)	4	Computer Age Statistical Inference	Prof Jeff J F Yao, Department of Statistics & Actuarial Science
Yan Junran	BSc(4)	4	The role of centromere and kinetochore proteins in anoxia-induced suspended animation and recovery in S. cerevisiae	Dr Karen W Y Yuen, School of Biological Sciences
Zeng Ji	BSc(4)	3	L2 Estimates of d-bar Operator on Complex Manifolds	Prof Ngai Ming Mok, Department of Mathematics
Zhou Ruiyi	BSc(4)	4	Adapting Scalable Correlated Electronic Structure Theory to Born-Oppenheimer Molecular Dynamics Simulations	Dr Jun Yang, Department of Chemistry

2016-17

Name	Curriculum	Year	Project Title	Supervisor
Chu Wing Tung	BSc(4)	4	Comparison of the carbon metabolism of wild-type and transgenic Arabidopsis with fast-growing phenotype	Dr Wallace B L Lim, School of Biological Sciences
Dai Wei	BSc(4)	5	Laboratory Astrochemistry: Catalytic Conversion of Methanol to Hydrocarbon Compounds over Dust Grains	Prof Allan S C Cheung, Department of Chemistry
Ho Julian Xi Wei	BSc(4)	5	Supplementation of oleic acid increases contractility of human engineered cardiac tissues	Dr Kwok Ming Yao & Dr Wendy W Y Wong, School of Biomedical Sciences
Ho Ngai Hei Ernest	BSc(4)	4	Marginal Sea for Plastic Cleanup: (Micro)plastic Characterisation & Patterns	Dr Christelle A Not, Department of Earth Sciences
Lai Siu Kit Vincent	BSc(4)	4	Correlation of joint spacing and rock texture of granites in Hong Kong	Dr Louis N Y Wong, Department of Earth Sciences
Li Shuangning	BSc(ActuarSc)(4)	4	The Sample Size Required in Importance Sampling	Prof Jeff J F Yao, Department of Statistics and Actuarial Science
Lo In	BSc(4)	4	Effect of coffee pre-feeding on postprandial glucose and lipid metabolism	Dr Jimmy C Y Louie, School of Biological Sciences
Lui Jeffrey	BSc(4)	4	FoxD3 directs gliogenesis of neural crest progenitors through post-translational regulation of Ngn2 stability	Prof Kathryn S E Cheah, School of Biomedical Sciences
Man Jason Yin Hei	BSc(4)	4	A Biomimetic Approach to the Development of Ascorbate Selective Fluorescent Probe for Biological Imaging	Dr Ho Yu Au-Yeung, Department of Chemistry
Ni Haozheng	BSc(4)	4	Modelling Discrete-Valued Time Series	Dr Guodong Li, Department of Statistics and Actuarial Science
Rabbani Mashiat	BSc(4)	4	Evaluation of Nucleoside Analogues as Potential Anti-Cancer Drugs	Prof Alice S T Wong, School of Biological Sciences
Tse Yuen Cheong	BSc(4)	4	Design, Synthesis and Photophysical Study of Cyclometallated N^C^N Alkynylplatinum(II) Complexes	Prof Vivian W W Yam, Department of Chemistry
Wong Thomas Hin Fung	BSc(4)	4	Chemical Biology of genipin's Anticancer Activities	Prof Chi Ming Che, Department of Chemistry
Wong Wing Yan	BSc(4)	4	Interference Study on ttbb Final State by Monte Carlo Event Generation for a Heavy Higgs Search at the ATLAS Experiment at the LHC	Dr Yanjun Tu, Department of Physics

Yang Ruoxuan	BSc(4)	4	Representations of integers by sums of polygonal numbers	Dr Benjamin R Kane, Department of Mathematics
Yau Yu Yan	BSc(4)	4	Environmental implication on livestock production	Dr Christelle A Not, Department of Earth Sciences
Zhang Zhiqian	BSc(4)	4	CRISPR/Cas9 mediated cloning of Epstein-Barr virus strain from cell line derived from local Nasopharyngeal Carcinoma patient sample	Prof Dong-Yan Jin, School of Biomedical Sciences

2015-16

Name	Curriculum	Year	Project Title	Supervisor
Fan Ruolin	BSc(4)	4	Exploring chondro-osteoblastic lineage differentiation and the role of hypertrophic chondrocyte	Prof Kathryn S E Cheah, School of Biomedical Sciences
Guo Fengyi	BSc(4)	4	Bird Dialects: Geographic Song Divergence of the Common Tailorbird (Orthotomus sutorius) in Asia	Dr Timothy C Bonebrake, School of Biological Sciences; Dr Caroline E Dingle, Department of Earth Sciences
Hassan Ayon Ahmed	BSc(4)	4	Fucosylation of Sialyl Lewis X is essential for P-selectin mediated tumor-mesothelial adhesion in ovarian cancer metastasis	Prof Alice S T Wong, School of Biological Sciences
Husain Abdullah	BSc(4)	4	Bio-molecular Fluorescence Complementation of Split GFP as a reporter for G-protein coupled receptor dimerization	Prof Billy K C Chow, School of Biological Sciences
Koo Ho Tan	BSc(ActuarSc)(3)	3	A Study on Interest Rate Models	Dr Kam Pui Wat, Department of Statistics and Actuarial Science
Lam Ting Chak	BSc(4)	4	Effects of chitosan nano-fiber on derivation of mature Schwann cells from bone marrow stromal cells	Prof Daisy K Y Shum, School of Biomedical Sciences
Lei Wa Yan	BSc(4)	4	Analysis of joint spacing distribution in tuff in Hong Kong	Dr Louis N Y Wong, Department of Earth Sciences
Leung Yi Lok Enoch	BSc(4)	4	On the Predictions of Early Galaxy Formation from Quantum Wave Dark Matter in the Hubble Frontier Fields	Dr Jeremy J L Lim, Department of Physics
Liu Yangdongling	BSc(4)	4	Synthesis, Characterization and Photophysical Study of Face-to-Face Dinuclear Platinum(II) Alkynyl Phosphine Complexes	Prof Vivian W W Yam, Department of Chemistry
Luo Di	BSc(4)	4	Improving Density Functional Theory with Artificial Neural Network	Prof Guanhua Chen, Department of Chemistry; Dr Shizhong Zhang, Department of Physics
Mak Ka Ho Jason	BSc(4)	4	Determining the regulation mechanism of centromeric transcription in Saccharomyces cerevisiae	Dr Karen W Y Yuen, School of Biological Sciences
Sun Chenyue	BSc(4)	4	Phosphorescent Tungsten(VI) cis-Dioxo complexes	Prof Chi Ming Che, Department of Chemistry
Wang Qinan	BSc(4)	4	A multi-bit Quantum Key Distribution Scheme	Prof Hoi Fung Chau, Department of Physics
Wang Zhongmin	BSc(4)	4	Treatment of Epstein-Barr Virus Infection in Nasopharyngeal Carcinoma Cells by CRISPR/Cas9 Targeting of viral genes	Prof Dong-Yan Jin, School of Biomedical Sciences
Wen Boya	BSc(4)	4	Fermat Type Functional Equations	Prof Tuen Wai Ng, Department of Mathematics
Wu Teng	BSc(3)	4	Hybrid confidence region based on empirical distribution function	Prof Stephen M S Lee, Department of Statistics and Actuarial Science
Xiong Lingyun	BSc(4)	4	Functional Role of hnRNP A1 on Alternative Splicing in Hepatocellular Carcinomas (HCC)	Dr Kin Hang Kok, Department of Microbiology; Dr Kwok Ming Yao, School of Biomedical Sciences
Yau Yu Tung	BSc(ActuarSc)(3)	3	Spectral Analysis of Large Random Graphs	Prof Jeff J F Yao, Department of Statistics and Actuarial Science
Yiu Sum Yee Joyce	BSc(4)	4	The geochemistry of the Vijayan anatectic melts, eastern Sri Lanka	Dr Suchin Chang, Department of Earth Sciences

Yuen Suet Wai	BSc(4)	4	Artifical light environments alter prey attraction outcomes of orb weaver spiders in Hong Kong	Dr Timothy C Bonebrake, School of Biological Sciences
Zhang Yongquan	BSc(4)	4	Complex Manifolds	Prof Ngaiming Mok, Department of Mathematics
Zhang Zhe	BSc(4)	4	Crosstalk between Sufu and RBPJ in Mammalian Ventral Hindbrain Neurogenesis	Prof Mai Har Sham, School of Biomedical Sciences

2014-15

Name	Curriculum	Year	Project Title	Supervisor
Cai Weixin	BSc(3)	3	Buffered Autoregressive Model with Exogenous Variables	Dr Philip L H Yu, Department of Statistics and Actuarial Science
Chan Hau Sun	BSc(3)	3	Intramolecular (4+3) cycloadditions of aziridinyl enolsilanes	Prof Pauline Chiu, Department of Chemistry
Chan Ho Wang	BSc(3)	3	Anammox Bacteria in Animal System	Dr Jidong Gu, School of Biological Sciences
Chan Hok Fung	BSc(3)	5	Physiologically-relevant doses of UVA exposure alters human skin keratinocytes growth	Dr Jetty C Y Lee, School of Biological Sciences
Chan Ka Ying Tiffany	BSc(3)	3	Aptamers for Malaria Diagnosis	Dr Julian A Tanner, Department of Biochemistry
Chan Ming Yan	BSc(3)	3	Implement the Light Profile of Galaxies in Construction of Gravitational Lensing Field	Dr Jeremy J L Lim, Department of Physics
Cheng Tsz Fung	BSc(3)	3	Roles of BART microRNAs in Epstein-Barr virus-induced epithelial transformation	Prof Dong-Yan Jin, Department of Biochemistry
Hu Chenchen	BSc(3)	3	Data Visualization and Infographics	Dr Philip L H Yu, Department of Statistics and Actuarial Science
Lee Ka Ming	BSc(4)	3	Hidden Mathematics in Daily Life: Packing Problem and Its Related Topics	Prof Wai Ki Ching, Department of Mathematics
Leung Pui Shan	BSc(3)	3	A Less Parametiric Mass Distribution Model For MACS0647	Dr Jeremy J L Lim, Department of Physics
Qian Zhaozhi	BSc(3)	3	A New Weighted Distance-based Ranking Model with Geometrical Interpretation	Dr Philip L H Yu, Department of Statistics and Actuarial Science
Tsui Wing Sum Regine	BSc(3)	3	Zircon U-Pb Age and Geochemistry of the Habahe Batholith in the Chinese Altai, NW China and their tectonic implications	Prof Min Sun, Department of Earth Sciences
Zhang Hongyuan	BSc(3)	3	Role of Laminin Proteins in Planarian Stem Cell Maintenance and Regeneration	Prof Danny Chan, Department of Biochemistry

2013-14

Name	Curriculum	Year	Project Title	Supervisor
Chan Kin Ming & Cheng Ka Hei	BSc(3)	3	Physics of Very Degenerate Atomic Gases	Dr Shizhong Zhang, Department of Physics
Chan Pak Chung	BSc(3)	3	Identifying the Planarian homologs of FOXM1 and FOXO1 transcription factors	Dr Kwok Ming Yao, Department of Biochemistry
Cheung Pak Hin Hinson	BSc(3)	3	Characterization of liver-targeting recombinant AAV for gene delivery in mice	Prof Dong Yan Jin, Department of Biochemistry
Fung King Cheong	BSc(3)	3	Generalizations of the factorial function	Prof Kai Man Tsang, Department of Mathematics

Ho Chau Ha	BSc(3)	3	Transcriptome wide identification of viral miRNA targets using PAR-CLIP	Dr Kin Hang Kok, Department of Biochemistry
Lam Tsz Fung	BSc(3)	3	Investigation of the role of PAX6 in Alzheimer's disease	Dr You Qiang Song, Department of Biochemistry
Li Yu	BSc(3)	3	Cohomology Groups with Applications in Complex Geometry	Prof Ngaiming Mok, Department of Mathemtics
Luo Jie	BSc(3)	3	Hunting for CCOs	Dr Stephen C Y Ng, Department of Physics
Miao Yiqiao	BSc(3)	3	Discussions on the Inefficiency of the AIC When Selecting Models from Separate Families, and Modifications	Prof Kai Wang Ng, Department of Statistics and Actuarial Science
Pang Wenqi	BSc(3)	3	The roles of Suppressor of fused in mammalian craniofacial development	Prof Mai Har Sham Department of Biochemistry
Rodríguez Caro Helena	Exchange	1	Differential expression pattern of Cdo and Boc in inner ear development	Dr Elaine Y M Wong, Department of Biochemistry
Sun Lianyi	BSc(ActuarSc)(3)	3	Consensus Clustering in Community Detection: Its Enhancement and Application	Dr Jeff J F Yao, Department of Statistics and Actuarial Science
Tang Sze Lok Marco	BSc(3)	3	Development of fluorescence polarization techniques to probe DNA aptamer-mediated molecular recognition	Dr Julian A Tanner, Department of Biochemistry
Wang Linsheng	BSc(3)	3	Characterization of the Circadian Rhythms in Premature Aging Cells	Dr Zhongjun Zhou , Department of Biochemistry
Wong Ching Kit	BSc(3)	2	Is the geomagnetic field reversing now?	Prof Lung Sang Chan, Department of Earth Sciences
Wong Mo Dick	BSc(ActuarSc)(3)	3	Large Dimensional Analysis of Perturbed Wishart Process	Dr Jeff J F Yao, Department of Statistics and Actuarial Science
Yang Shihao	BSc(ActuarSc)(3)	3	Valuing Guaranteed Minimum Death Benefits	Prof Hailiang Yang, Department of Statistics and Actuarial Science
Yang Yingrui	BSc(3)	3	Approximation of Ruin Probability in Infinite Time under Classical Risk Process	Dr Eric C K Cheung, Department of Statistics and Actuarial Science
Yeung Fung Chun	BSc(3)	3	Correlation between Earth tides and earthquake occurrence	Prof Lung Sang Chan, Department of Earth Sciences
Zhang Qichen	BSc(3)	3	UreG Protein from Helicobacter pylori as A Nickel-Binding Chaperone and A GTPase	Prof Hongzhe Sun, Department of Chemistry

2012-13

Name	Curriculum	Year	Project Title	Supervisor
Chai Wai Yeeng	BSc(3)	3	Effect of Bisphenol A (BPA) on both ERα - positive and ERα - negative ovarian cancer cells	Dr A S T Wong, School of Biological Sciences
Cheng Ka Hei	BSc(3)	2	Generalizations of the factorial function	Prof K M Tsang, Department of Mathematics
Chiu Yat Sing Risheng	BSc(3)	3	U-Pb zircon age and geochemical as constrains on the emplacement time of andesites from Kluwih, East Jave, Indonesia	Prof J Malpas, Department of Earth Sciences
Chow Tai Cheong	BSc(3)	3	Role of PTPN21 in Promoting STAT5 Transcriptional Activity via ErbB4 Receptor	Dr Y Q Song, Department of Biochemistry
Fung Sin Yee	BSc(3)	3	Construction of a NS1-mutated influenza A virus by reverse genetics	Prof D Y Jin, Department of Biochemistry
Hui Tin Yan	BSc(3)	3	Central-place foraging of sand bubbler crab Scopimera intermedia	Prof Gray Williams, School of Biological Sciences
Hung Oi Ying	BSc(3)	3	Test of FOXM1 as an enhancer of iPSC reprogramming	Dr K M Yao, Department of Biochemistry

Kung Chung Yee	BSc(3)	3	Construction of a miR-BART-deficient Epstein Barr virus by recombineering	Prof D Y Jin, Department of Biochemistry
Kwong Hiu Tung	BSc(3)	3	Geochemical Signature of Pore Water from Core Sample and its Implications on Palaeo-environment in Cangzhou, China	Prof J J Jiao, Department of Earth Sciences
Lai Cheuk Hei	BSc(3)	2	Pathogenesis of Influenza viruses	Dr W Y Chan, Department of Pathology; Dr C W Chan, School of Public Health
Lam Chi Chung	BSc(3)	3	The Complex Filamentary Nebula at the center of the Perseus Cluster	Dr J J L Lim, Department of Physics
Leung Wing Sze, Amy	BSc(3)	3	Taxonomic and phylogenetic status of Desmos dumosus (Annonaceae)	Prof R M K Saunders, School of Biological Sciences
Leung Ying Chi	BSc(3)	3	Detections of cosmic-rays and neutrinos in underground laboratories	Dr J K C Leung & Dr J C S Pun, Department of Physics
Li Shengchao	BSc(3)	3	Detections of cosmic-rays and neutrinos in underground laboratories	Dr J K C Leung & Dr J C S Pun, Department of Physics
Li Yan Hei	BSc(3)	3	Geochronological dating and geochemical analysis of Tuen Mun Formation and tectonic implication	Prof M F Zhou, Department of Earth Sciences
Lin Tsen-yuan	BSc(3)	3	Quantum computing	Prof Z D Wang, Department of Physics
Lo Hoi Ki Katy	BSc(3)	3	The sedimentary environment and palaeoecology of the Wonosari Formation, East Java as inferred by petrographic thin-sections	Prof J Malpas, Department of Earth Sciences
Lo Wing Fung	BSc(3)	3	Songs in the city: The effects of urban noise on bird song.	Dr Caroline Dingle, School of Biological Sciences
Ma Yik Ki	BSc(3)	3	The Radio Magnetospheres of Chemically-Peculiar Bp/Ap Stars	Dr J J L Lim, Department of Physics
Peng Jun	BSc(3)	2	Calculus of variation	Prof W S Cheung, Department of Mathematics
Song Yifan	BSc(3)	3	Physics of Very Degenerate Atomic Gases	Dr S Z Zhang, Department of Physics
Tam Cheuk Yan	BSc(3)	3	An assessment on the suitability of organic carbon isotopes for sea-level reconstructions	Prof Y Q Zong, Department of Earth Sciences
Tang Yunfan	BSc(3)	3	Backward Stochastic Differential Equations in Option Pricing	Prof H Yang, Department of Statistics and Actuarial Science
Tse Man Nok	BSc(3)	3	Co-regulation of Irx3 and Irx5 by Lmx1a transcription factor".	Dr M H Sham, Department of Biochemistry
Wan Kai Tin Leon	BSc(3)	3	Rotational Modulation in the Radio Emission of Active Late-Type Dwarf Stars: Active Stellar Longitudes or Not?	Dr J J L Lim, Department of Physics
Wong Ka Wai	BSc(3)	3	c.−14C>T mutation in IFITM5 alters the onset and rate of in vitro bone mineralization: Implication for osteogenesis imperfect (type V)	Dr D Chan, Department of Biochemistry
Wong Yin Wai	BSc(3)	3	NMMIIA is a functional component in normal epithelial cell organization in both 2D and 3D environment	Dr J D Huang, Department of Biochemistry
Wu Qihang	BSc(3)	3	Chronogical constraints on the polyphase deformation of Chinese Altai: Implications for tectonic evolution	Prof M Sun, Department of Earth Sciences
Yin Grace Wing Ie	BSc(3)	3	Identification of extracellular factors that determine cancer cell survival under hypoxic condition	Dr N S Wong, Department of Biochemistry
Yuen Chun Kit	BSc(3)	3	Gene targeting in cultured mammalian cells using TALEN technology	Dr K H Kok, Department of Biochemistry
Zhang Shixiao	BSc(3)	3	Simulation Study of Finite-sample Performance of Maximum Likelihood Estimator	Prof K W Ng, Department of Statistics and Actuarial Science

Zheng Yao	BSc(ActuarSc)(3)	3	Applications of Nonlinear Time Series Models	Prof W K Li, Department of Statistics and Actuarial Science Department of Statistics and Actuarial Science

2011-12

Name	Curriculum	Year	Project Title	Supervisor
Chau Tsz Kit	BSc(3)	3	Long-term radio observation of young and rapidly-rotating late-type dwarf star AB doradus	Dr J J L Lim, Department of Physics
Cheng Chi Lok Kevin	BSc(3)	3	Characterization of whole gut bacterial community in oreiental cockroach	Prof F C C Leung, School of Biological Sciences
Chong Wing Fung	BSc(3)	3	Copulas and comonotonicity in Statistics and Risk Management	Dr K C Cheung, Department of Statistics and Actuarial Science
Ho Sze Hang	BSc(3)	3	Nedd9 expression and its potential role in mediating neural crest delamination induced by Sox9	Dr M Cheung, Department of Biochemistry
Ji Hao	BSc(3)	3	Properties of depth functions as measure of representativeness	Prof S M S Lee, Department of Statistics and Actuarial Science
Kong Kar Lun	BSc(3)	3	Elementary methods in prime number theory	Prof K M Tsang, Department of Mathematics
Lai Tsz Pui	BSc(3)	3	Probing new and specific interactions between medicinally relevant metal complexes and proteins using X-ray crystallography	Prof H Z Sun, Department of Chemistry
Lam Hing Ha	BSc(3)	3	Optical dating of anthropological site in Ding Cun, ShanXi	Dr S H Li, Department of Earth Sciences
Lau Matthew Chung Hin	BSc(3)	2	Elementary methods in prime number theory	Prof K M Tsang, Department of Mathematics
Leung Man Him	BSc(3)	3	Development of Fluorophore labeled bacterial machinery for in situ monitoring of oxygen levels and gene expression in mammalian host	Dr A Yan, School of Biological Sciences
Li Xinyu	BSc(3)	3	Condensate dark matter star	Prof K S Cheng, Department of Physics
Li Zhangyun	BSc(3)	2	Copulas in risk management	Dr K C Cheung, Department of Statistics and Actuarial Science
Lin Tsen-yuan	BSc(3)	2	Detections of cosmic-rays and neutrinos in underground laboratory	Dr J K C Leung & Dr J C S Pun, Department of Physics
Ma Sophia Ka Yan	BSc(3)	3	The role of autophagy in planarian regeneration and degrowth	Dr D Chan, Department of Biochemistry
Mung Kwan Long	BSc(3)	3	The effects of hypoxia on unfolded protein response signaling pathways in cancer cells	Dr N S Wong, Department of Biochemistry
Pak Chol Min	BSc(3)	3	Transparent Conducting Films: Ga-doped ZnO on Sapphire Substrates by RF Magnetron Sputtering	Dr F C C Ling, Department of Physics
Song Yifan	BSc(3)	2	Detections of cosmic-rays in underground laboratories	Dr J K C Leung & Dr J C S Pun, Department of Physics
Tsang Man Yin	BSc(3)	3	The early stages of sulphate crystallization	Dr K Lemke, Department of Earth Sciences
Tso Tsz Ying	BSc(3)	3	Magnetic properties of sediment of Ha Pak Nai, Yuen Long, Hong Kong	Prof L S Chan, Department of Earth Sciences
Wong Kam Hung	BSc(3)	3	Geology and molybdeniteRe-Os geochronology of the Baishizhang porphyry Mo deposit, SE China	Prof M F Zhou, Department of Earth Sciences
Wong Kwok Fai	BSc(3)	3	Approximations for Ruin Probabilities in Insurance Risk Theory	Dr E C K Cheung, Department of Statistics and Actuarial Science

Wong Yat Sing	BSc(3)	3	Laser induced fluorescence spectroscopy of platinum boride	Prof A S C Cheung, Department of Chemistry
Wu Xiyuan	BSc(3)	2	Insurance Risk	Prof H Yang, Department of Statistics and Actuarial Science

2010-11

Name	Curriculum	Year	Project Title	Supervisor
Chao Wai Min Cherie	BSc(3)	3	Does geldanamycin activate Unfolded Protein Response (UPR) in cancer cells?	Dr N S Wong, Department of Biochemistry
Chau Wayne C	BSc(3)	2	Observational and Analytical Studies of the Photometric Light Curves of Variable Stars	Dr J C S Pun, Department of Physics
Cheung Ka Chun Arthur	BSc(3)	3	Geometrical study of jointed columns in Hong Kong	Prof L S Chan, Department of Earth Sciences
Chiu Ka Yi	BSc(3)	3	Pos Selim Landslide in Malaysia	Prof A Malone, Department of Earth Sciences
Chiu Man Hung	BSc(3)	3	Telomeres, Telomerase and Tumorigenesis	Dr K M Yao, Department of Biochemistry
Chong Tsz Yat Ian	BSc(3)	3	Mutational Studies on protein binding sites of UCRNA VINC/NEAT J	Prof F C C Leung, School of Biological Sciences
Chong Tsz Yat Ian	BSc(3)	3	Conflicting signals: A new approach to understanding neural crest migration	Dr M H Sham, Department of Biochemistry
Hui Man Ning	BSc(3)	3	Regulation of Sox9 expression in the developing chick neural tube by the Sonic Hedgehog and Retinoic acid signaling	Dr M Cheung, Department of Biochemistry
Ko Man Ying	BSc(3)	4	Synthesis and Photo-physical Properties of Platinum (II) Complexes with Oligo(ortho-phenyleneethynylene) Bridging Ligands	Prof C M Che, Department of Chemistry
Kwok Yan Ho	BSc(3)	3	Current density distribution in carbon nanotube based electronic devices	Prof G H Chen, Department of Chemistry
Li Wing Yi	BSc(3)	3	Coronal Magnetic Activity of the Fast-Rotating Solar-type Star AB Doradus	Dr J J L Lim, Department of Physics
Li Yuen Tsun	BSc(3)	3	Climate and environmental changes in Tibet Plateau in the past 2000 years	Dr Z Liu & Dr C Zhao, Department of Earth Sciences
Ma Jialiu	Exchange	1	Metal and Life	Dr Ligana Hu, Department of Biochemistry
Mau Chun Lok	BSc(3)	3	"Let's do some correct statistics…" - What do we mean by that?	Prof S M S Lee, Department of Statistics and Actuarial Science
Shi Yuan	BSc(3)	2	Mathematical Problems in Quantum Mechanics	Dr S Wu, Department of Mathematics
So Kwok Ming	BSc(3)	3	Homoleptic Metal Organochalcogenides As A Single-source Precursor of M(E)x: Preparation and Reactivity Study on Nanostructured RuSe2 for Chemoselective Catalytic Reduction	Prof C M Che, Department of Chemistry
So Lok Hin	BSc(3)	3	Amphibians and Reptiles in Hong Kong Catchwaters	Dr N E Karraker, School of Biological Sciences
Tang Chan Estela	BSc(3)	3	Targeted Therapy Design	Dr G Yin, Department of Statistics and Actuarial Science
Tang Kwok Hei Eric	BSc(3)	2	Comparative anaylsis of the host's immune responses against 3 different genotypes of PRRSV	Prof F C C Leung, School of Biological Sciences
Wong Ka Tat	BSc(3)	3	Coronal Magnetic Activity of the Fast-Rotating Solar-type Star PZ Telescopium	Dr J J L Lim, Department of Physics

Wong Wai Chung	BSc(3)	3	What is in a drop of seawater? A mass spectrometric study of ion clusters in natural electrolyte solutions	Dr K Lemke, Department of Earth Sciences
Wu Hung Kit	BSc(3)	2	Analysing the Dark Accelerator - HESS J1745-303 with Fermi-LAT	Prof K S Cheng, Department of Physics
Wu Man Ho	BSc(3)	3	Gamma-ray Emissions from Galactic Globular Clusters as seen by Fermi LAT	Prof K S Cheng, Department of Physics
Yuen Yan Ling	BSc(3)	3	A Population Study of the Hong Kong Newt	Dr N E Karraker, School of Biological Sciences

2009-10

Name	Curriculum	Year	Project Title	Supervisor
Chan Chi Chung	BSc(3)	3	Coronal magnetic activity at the divide between partially and fully convective star	Dr J J L Lim, Department of Physics
Hsu Siu Fai	BSc(3)	3	Supersymmetric Quantum Mechanics and the Witten Index	Dr S Wu, Deparment of Mathematics
Lam Suk Hang	BSc(3)	3	Spintronics and novel topological states of matter	Prof S Q Shen, Department of Physics
Ren Yi Cooper	BSc(3)	3	Climate Change and larval behavior: Substrate Preference by Barnacle Larvae in future acidified ocean	Dr V Thiyagarajan, School of Biological Sciences
Tsang Tsz Ho	BSc(3)	3	Estimation of surface wind speed over heterogeneous terrain using boundary layer theory and downscaling technique	Dr C C Ling, Department of Physics

2008-09

Name	Curriculum	Year	Project Title	Supervisor
Chan Ka Lok	BSc(3)	3	Preparation of oil-in-water emulsion by ultrasonication for direct ICP-MS metal-in-oil analysis	Dr W T Chan, Department of Chemistry
Chan Yuk Lun	BSc(3)	3	Sox9 SUMOylation and Signaling Molecules are involved in controlling Neural Crest Delamination	Dr M C H Cheung, Department of Biochemistry
Ho Chi Wang John	BSc(3)	3	Molecular Cloning and Characterization of Chicken Galanin Receptors	Prof F C Leung, School of Biological Sciences
Lam Yan Ting	BSc(3)	3	Quantum Information	Dr H F Chau, Department of Physics
Lam Yuen Man	BSc(3)	3	Probing the protein environmental factors important for the effector binding in E. coli global transcription factor FNR	Dr A Yan, School of Biological Sciences
Ng Kam To	BSc(3)	3	Sox9 function is regulated by SUMOylation in avian neural crest development	Dr M C H Cheung, Department of Biochemistry
So Ming Lai	BSc(3)	3	Seismogrammic analysis of earthquakes in Hong Kong Region	Prof L S Chan, Department of Earth Sciences
Sung Ka Chun	BSc(3)	3	Higher Rank Numerical Ranges	Dr N K Tsing, Department of Mathematics
Wang Xuan	BSc(3)	3	Molecular evolution of porcine reproductive and respiratory syndrome virus Nsp2 variants during serial passage in MARC-145 cells	Prof F C Leung, School of Biological Sciences
Yu Hoi Fung	BSc(3)	3	Pulsar glitches	Prof K S Cheng, Department of Physics

2007-08

Name	Curriculum	Year	Project Title	Supervisor
Chan Hoi Shan	BSc(3)	3	Petrology and Geochemistry of mantle xenoliths from Syria	Prof J G Malpas, Department of Earth Sciences

Chau Ka Hung Bolton	BSc(3)	3	Does Sumoylation affect Sox9 functions in neural crest development	Dr M C H Cheung, Department of Biochemistry
Chen Hoi Lam	BSc(3)	3	Cloning and characterization of sprouty proteins in chicken	Prof F C C Leung, School of Biological Sciences
Cheung Chung Ching	BSc(3)	4	Finite Geometry	Dr P P W Wong, Department of Mathematics
Fu Shing	BSc(ActuarSc)(3)	3	Extreme Value Theory and Applications	Prof W K Li, Department of Statistics & Actuarial Science
Ho Koon Sing	BSc(3)	3	ICP MS Measurement of Matals in Single-Cell Algae	Dr W T Chan, Department of Chemistry
Kwong Hiu Jing	BSc(3)	3	Paleomagnetic study of Linzizong volcanic rocks, Linzhou, southern Tibet: implications for positioning Paleogene Eurasia's southern edge before and after India collision	Dr J R Ali, Department of Earth Sciences
Lam Wai Ting	BSc(3)	3	Polymer solar cells	Dr A B Djurišić, Department of Physics
Lau An Yi Annie	BSc(3)	3	Barchan dunes in the middle reaches of Yarlung Zangbo, Southern Tibet	Dr A Switzer, Department of Earth Sciences
Leung Hoi Tik Alvin	BSc(3)	3	Differential Equations and Mathematical Biology	Prof W S Cheung, Department of Mathmatics
Leung Kwun Lun	BSc(3)	3	Geochemistry of Alegedayi ophiolite from the Altai, Xinjiang, China and its tectonic implications	Prof M Sun, Department of Earth Sciences
Li Hiu Lung	BSc(3)	3	Theory of spintronics	Dr S Q Shen, Department of Physics
Li Long	BSc(3)	3	Riemann surfaces and / or complex manifolds	Prof N Mok, Department of Mathematics
Mak Ho Yan Queenie	BSc(3)	3	Cellular response to ER-stress signals in early development	Dr M C H Cheung, Department of Biochemistry
Ng Wai Pan	BSc(3)	3	Kannaviou Formation of Cyprus and its relationship with the Troodos Complex	Prof J G Malpas, Department of Earth Sciences
Pak Ho	BSc(3)	3	Characterization of the human matrix metalloproteinase 9 by p7056K: role pf GATA-4, GATA-5, and GATA-6	Dr A S T Wong, School of Biological Sciences
Pun Ying Anna	BSc(3)	2	Projective Geometry and Modern Algebra	Dr P P W Wong, Department of Mathematics
Tam Wan Ting	BSc(3)	3	Cloning and Characterization of the Putative Receptor (Heat shock protein 90) of Infectious Bursal Disease Virus	Prof F C C Leung, School of Biological Sciences
Tang Yun Sang	BSc(3)	3	Study of antimicrobial peptides by NMR spectroscopy	Dr K H Sze, Department of Chemistry
Wong Kingsley Jin-ho	BSc(3)	3	Spatio-temporal variations in diversity and abundance of benthic crustaceans in subtropical Hong Kong waters	Dr K M Y Leung, School of Biological Sciences