Track	#	Research Group	Title	Supervisor 1	Supervisor 2
SPE	1	Green Chemical Reaction Engineering	Mg-3-hydroxybutyrate: a novel food supplement?	prof. dr. ir. HJ (Erik) Heeres group	H. Kloosterman
SPE	2	Green Chemical Reaction Engineering	Pyrolysis of biomass in ammonia: an attractive route for N-containing platform chemicals?	prof. dr. ir. HJ (Erik) Heeres group	H. Kloosterman
SPE	3	Green Chemical Reaction Engineering	A novel biobased monomer: Furan 2,5-dipropionic acid	prof. dr. ir. HJ (Erik) Heeres group	H. Kloosterman
SPE	4->7	Product Technology	Plastic recycling (room for 4 students)	prof. dr. F. (Francesco) Picchioni group	H. Kloosterman
SPE/PTL	8	Exxfire	Fire suppression: sustainability of innovative technology	Dr. J. (Joost) Demmink (Joost.Demmink@exxfire.com), Dr. G. (Gerald) Jonker	H. Kloosterman
PTL	9	VMI	Sustainable Industrial Packaging for Global Supply Chains	Dr. D. (Diego) Ribas Gomes, Robert Louis (rlouis@vmi-group.com)	G. Jonker
PTL	10	REMEHA BV	Sustainable Packaging	Jolanda Beeren, Director QHSE at Remeha (Jolanda.beeren@remeha.nl) and dr. G. (Gunn) Larsen	G. Jonker
PTL	11	Advanced Production Engineering	Mitigating capacity decay of lithium-sulfur batteries with thin nanoporous carbon films	prof. dr. Y. (Yutao) Pei	A.A. Geertsema
PTL	12	Advanced Production Engineering	Single-atom/nanoparticle noble-metal electrocatalysts anchored on nanoporous graphene for water electrolysis	prof. dr. Y. (Yutao) Pei	A.A. Geertsema
PTL	13	Advanced Production Engineering	2D smectite clay enhanced high performance triboelectric nanogenerator	prof. dr. Y. (Yutao) Pei	A.A. Geertsema
PTL	14	Advanced Production Engineering	Silicon dioxide films for flexible ultra-durable triboelectric nanogenerator	prof. dr. Y. (Yutao) Pei	A.A. Geertsema
PTL	15	Advanced Production Engineering	Polyacrylonitrile fabric separators for lithium-sulfur batteries	prof. dr. Y. (Yutao) Pei	A.A. Geertsema
PTL	16	Advanced Production Engineering	Additive manufacturing of high entropy alloy: orientation-dependent mechanical properties	prof. dr. Y. (Yutao) Pei	A.A. Geertsema
PTL	17	Advanced Production Engineering	Experimental calibration of a miniature sensing for wind and water flow monitoring	dr. A. (Ajay) Kottapalli, assistant professor	A.A. Geertsema
PTL	18	Advanced Production Engineering	Flow calibrations in gravity-based intravenous infusions	dr. A. (Ajay) Kottapalli, assistant professor	A.A. Geertsema
PTL	19	Advanced Production Engineering	Wireless Parkinson's gait monitoring and GUI development through 3D printed sensorized shoe soles	dr. A. (Ajay) Kottapalli, assistant professor	A.A. Geertsema
PTL	20	Computational Mechanical and Materials Engineering	Scour Protection around the Flexible Bladder of the Ocean Battery	prof dr. A. (Antonis) Vakis	M. Mohebbi
PTL	21	Computational Mechanical and Materials Engineering	Forces acting on the Flexible Bladder of the Ocean Battery	prof dr. A. (Antonis) Vakis	M. Mohebbi
PTL	22	Computational Mechanical and Materials Engineering	Vacuum in the rigid reservoir of the Ocean Battery	prof dr. A. (Antonis) Vakis	M. Mohebbi
PTL	23	Computational Mechanical and Materials Engineering	Electrical design and integration of the Ocean Battery in a Wind Farm	prof dr. A. (Antonis) Vakis	M. Mohebbi
PTL	24	Computational Mechanical and Materials Engineering	Installation and Bulkhead design of the Rigid Reservoir of the Ocean Battery	prof dr. A. (Antonis) Vakis	M. Mohebbi
PTL	25	Computational Mechanical and Materials Engineering	Diving Bell design and safe access to the Ocean Battery	prof dr. A. (Antonis) Vakis	M. Mohebbi
PTL	26	Discrete Technology & Production Automation	Epidemics and Network Structure	prof. dr. ir. M. (Ming) Cao , Kathinka Frieswijk	A. Bosch
PTL	27	Discrete Technology & Production Automation	Tensegrity Drone Simulation and Design	prof. dr. ir. M. (Ming) Cao , Z. Liu	A. Bosch
PTL	28	Discrete Technology & Production Automation	Using game theory to incentivize social diffusion	prof. dr. ir. M. (Ming) Cao , L. Zino	A. Bosch
PTL	29	Discrete Technology & Production Automation	Robot Exploration In Unknown Environment	prof. dr. ir. M. (Ming) Cao , B. Yu	A. Bosch
PTL	30	Discrete Technology & Production Automation	Theme：convergence speed of learning algorithms in games	prof. dr. ir. M. (Ming) Cao B. Jin	A. Bosch
PTL	31	Discrete Technology & Production Automation	Integrating AI and model-based control systems	prof. dr. B. (Bayu) Jayawardhana	M. Muñoz Arias
PTL	32	Discrete Technology & Production Automation	Modeling of the Ocean Battery demonstrator	prof. dr. B. (Bayu) Jayawardhana	M. Muñoz Arias
PTL	33	Discrete Technology & Production Automation	Development of predictive model of human movement for adaptive mobile robot planning in smart factory floor	prof. dr. B. (Bayu) Jayawardhana	M. Muñoz Arias
PTL	34	Discrete Technology & Production Automation	Characterisation of MEMS flow sensors for infusion-pump systems	prof. dr. B. (Bayu) Jayawardhana	M. Muñoz Arias
PTL	35	Discrete Technology & Production Automation	Energetic Analysis of Control Strategies in Multi-Producer District Heating System Operations	prof.dr.ir. J.M.A. (Jacquelien) Scherpen, Juan Machado	M. Taheri
PTL	36	Discrete Technology & Production Automation	State Estimation in District Heating Systems	prof.dr.ir. J.M.A. (Jacquelien) Scherpen, Juan Machado	M. Taheri
PTL	37	Discrete Technology & Production Automation	Performing control tasks with an educational laboratory robot	prof.dr.ir. J.M.A. (Jacquelien) Scherpen, Saeed Ahmed	M. Taheri
PTL	38	Discrete Technology & Production Automation	Regulating blood pressure	prof.dr.ir. J.M.A. (Jacquelien) Scherpen, Saeed Ahmed	M. Taheri
PTL	39	Discrete Technology & Production Automation	Distributed control design for triangular robot formations	prof.dr.ir. J.M.A. (Jacquelien) Scherpen, Ningbo Li	M. Taheri
PTL	40	Discrete Technology & Production Automation	Dgital Twin	prof.dr.ir. J.M.A. (Jacquelien) Scherpen, Arijit Sarkar	M. Taheri
PTL	41	Discrete Technology & Production Automation	FEA and characterization of Spring Shape Memory Alloys for Flexible Robotics	dr. Mónica Isela Acuautla Meneses, assistant professor	M. Mohebbi
PTL	42	Discrete Technology & Production Automation	FEA of a cantilever piezoelectric energy harvesting	dr. Mónica Isela Acuautla Meneses, assistant professor	M. Mohebbi
PTL	43	Discrete Technology & Production Automation	Design of a corona discharge poling system for flexible electronics	dr. Mónica Isela Acuautla Meneses, assistant professor	M. Mohebbi
PTL	44	Discrete Technology & Production Automation	Programing a production line of the company Festo in combination of a robotic arm to improve industrial automation	dr. T. (Taraneh) Mokabber	G. Larsen

PTL	45	Smart Manufacturing Systems	Learning a controller of a ball and beam system from data via approximate nonlinearity cancellation	prof. dr. C. (Claudio) de Persis , Z. Hu	G. Larsen
PTL	46	Smart Manufacturing Systems	Learning attitude control from data	prof. dr. C. (Claudio) de Persis, A Bisoffi	G. Larsen
PTL	47	Smart Manufacturing Systems	Learning safe control for a simplified robot arm	prof. dr. C. (Claudio) de Persis, A Bisoffi	G. Larsen
PTL	48	Smart Manufacturing Systems	Learning a controller of a DC motor from data	prof. dr. C. (Claudio) de Persis, A Bisoffi	G. Larsen
PTL	49	Smart Manufacturing Systems	Learning optimal control for power systems from data	prof. dr. C. (Claudio) de Persis, X. Dai	G. Larsen
PTL	50	Smart Manufacturing Systems	Learning a controller of an inverted pendulum from synthetic data	prof. dr. C. (Claudio) de Persis, Z. Hu	G. Larsen
PTL	51	Smart Manufacturing Systems	Effect of Isolation on the Spread of an Epidemic	dr. N. (Nima) Monshizadeh, assistant professor	G. Larsen
PTL	52	Smart Manufacturing Systems	Aggregate Behaviors in Electricity Market	dr. N. (Nima) Monshizadeh, assistant professor	G. Larsen
PTL	53	Smart Manufacturing Systems	Targeted Interventions in Network Games	dr. N. (Nima) Monshizadeh, assistant professor	G. Larsen
PTL	54	Optimization and Decision Systems	Optimal Contract for Wind Power Producers	prof. dr. D. (Dario) Bauso, Azin Khaleghi	A. Hübl
PTL	55	Optimization and Decision Systems	Integration of Energy Storage into the Electricity Grid	prof. dr. D. (Dario) Bauso, Azin Khaleghi	A. Hübl
PTL	56	Optimization and Decision Systems	Utilizing Energy Storages for the Wind Power Plants	prof. dr. D. (Dario) Bauso, Azin Khaleghi	A. Hübl
PTL	57	Optimization and Decision Systems	Convergence in a Large Linear Production	prof. dr. D. (Dario) Bauso, Stefanny Ramirez	A. Hübl
PTL	58	Optimization and Decision Systems	Coalitional Games in Micro-grids with Multiple Retailers	prof. dr. D. (Dario) Bauso, Stefanny Ramirez	A. Hübl
PTL	59	Optimization and Decision Systems	A Joint Replenishment problem with Limited Warehouse Space	prof. dr. D. (Dario) Bauso, Stefanny Ramirez	A. Hübl
PTL	60	Optimization and Decision Systems	Motion planning in the presence of multiple obstacles	dr. Ashish Cherukuri, assistant professor	G. Jonker
PTL	61	Optimization and Decision Systems	Improving the efficiency of risk-averse motion planning	dr. Ashish Cherukuri, assistant professor	G. Jonker
PTL	62-63	Design group	Data-based model of housefly eye (room for 2 students)	dr. M. (Mauricio) Muñoz Arias	M. Taheri
PTL	64-65	Design group	Flapping wing micro aerial vehicle (room for 2 students)	dr. M. (Mauricio) Muñoz Arias	M. Taheri
PTL	66	Design group	Generic discrete event simulation model	dr. ing. A. (Alexander) Hübl	G. Jonker
PTL	67	Design group	Agent-based simulation within Organization	dr. ing. A. (Alexander) Hübl	G. Jonker
PTL	68	Energy and Environment	Data centers and renewable energy	dr. R.M.J. (René) Benders	T.M. Kousemaker
PTL	69	Energy and Environment	Water consumption hydrogen production	dr. R.M.J. (René) Benders	T.M. Kousemaker
PTL	70	Green Office (via Science shop)	Thought for food, food for thought	M. (Mehran) Mohebbi + drs. C.M. (Karin) Ree	T.M. Kousemaker
PTL	71	NOBIAN (via Science shop)	Darkness at Delfzijl	dr. ing. H. (Harm) Kloosterman + drs. C.M. (Karin) Ree	T.M. Kousemaker
PTL	72	Ecoras consultancy (via Science shop)	Microplastics in the Life Cycle	M. (Mehran) Mohebbi + drs. C.M. (Karin) Ree	T.M. Kousemaker
PTL	73	Midwifery-led units (via Science shop)	Blood in the birth pool	dr. ing. H. (Harm) Kloosterman + drs. C.M. (Karin) Ree	T.M. Kousemaker