

## List of courses that cannot be taken as electives by students in Sustainable Innovation

### Disclaimer

This list will be updated regularly, based on new insights, new courses and new course content of Bachelor College courses. The student should ascertain that study components in the study package do not have overlap in content, e.g. by checking the overlap tables of the programs offering the electives of choice. The examination committee will finally check your study package. In case you have questions regarding overlap, please contact Monique Jansen-Vullers (m.h.jansen-vullers@tue.nl).

### Overlap with major courses Sustainable Innovation (all specializations)

#### not allowed

not allowed		overlap with	
1ZV00, 1ZV60	Methodology for IE Research	0HV00	Behavioral research methods 1
2AS00	Statistical Data Analysis	0HV50	Behavioral Research Methods 2
2DD70 /2DD80	Statistiek	0HV00, 0HV50	Behavioral Research Methods 1+2
7U9X0	Onderzoek en Statistiek	0HV00, 0HV50	Behavioral Research Methods 1+2
DDB180	ID Green – design perspectives on sustainabilit	0SV00, 0SV10, 0SV20	Major SI year 1
JBG000	Data Science Ethics	0SAB0	USE Basis
JBM010	Data Statistics	0HV00, 0HV50	Behavioral Research Methods 1+2
JBM010	Data Statistics	JBM015	Data Statistics
JBM020	Data Science research methods	0HV00, 0HV50	Behavioral Research Methods 1+2
JBM020	Data Science research methods	JBM025	Data Science research methods

### Overlap with major courses Energy (courses in Mechanical Engineering)

*If you chose another specialization you can take those courses as an elective, but only one in a set of overlapping courses*

#### not allowed

not allowed		overlap with	
3BTX0	Thermische fysica	4EB00	Thermodynamics
3CTX0	Transportfysica	4PB00	Heat and Flow
4RA10	Introduction transport phenomena	3NCB0	Introduction transport phenomena
6P1X0	Fysische transportverschijnselen	4PB00	Heat and Flow
6A4X0	Inleiding Chemische binding en thermodynamica	4EB00, 4BC00	Thermodynamics, Chemically reacting flows
8NC00	Electromagnetism and optics	4EB00	Thermodynamics

### Overlap with major courses Smart Systems

*If you chose another specialization you can take those courses as an elective, but only one in a set of overlapping courses*

#### not allowed

not allowed		overlap with	
1BK50, 1BK60	Algorithmic Programming for Operations Management	2IP90	Programming
2IPG0	Intr. To object-oriented programming	2IP90	Programming
2IS60	App Programming	2IP90	Programming
2IT60	Logic and set theory	2ITS60	Logic and set theory for P&T
2WF40	Set Theory and Algebra	2IT60, 2ITS60	Logic and set theory
2WF50	Algebra en discrete wiskunde	2IT60, 2ITS60	Logic and set theory
2WH20	Programming en modelleren	2IP90	Programming

### Overlap with major courses Energy EN (courses in Electrical Engineering)

*If you chose another specialization you can take those courses as an elective, but only one in a set of overlapping courses*

not allowed		overlap with	
2DBA0	Differentiaalvergelijkingen en matrices	2DE20	Mathematics 1
2DBI00	Lineaire Algebra	2DE20	Mathematics 1
2DBN00	Lineaire Algebra	2DE20	Mathematics 1
2DM80	Biostatistiek & Lineaire Algebra	2DE20	Mathematics 1
2DN60	Lineaire algebra en vectorcalculus	2DE20	Mathematics 1
2WF20 and/or 2WF30	Linear Algebra 1 and/or Linear Algebra 2	2DE20	Mathematics 1
3AEX0	Electromagnetism	5EPA0	Electromagnetics

4DA00	Dynamica	2DE20	Mathematics 1
4DB00	Dynamics & control	5ESB0	Systems
5EAC0	Circuits	5XCA0	Fundamentals of Electronics
5ECB0	Electronic Circuits 1	5XCA0	Fundamentals of Electronics
DBB200	Creative electronics	5XCA0	Fundamentals of Electronics
JBM060	Advanced Mathematics 1 for Data Science	2WBB0 and 2DE20	Calculus and Mathematics 1
JBM070	Linear Algebra for Data Science	2DE20	Lineaire Algebra
JBM080	Advanced Mathematics 2 for Data Science	2WBB0 and 2DE20	Calculus and Mathematics 1

#### Overlap complete packages

Coherent package 'Sports, technology and behavior' and USE learning line 'Designing for People, Sports and Vitality (DfPSV)' cannot be taken in combination

#### Other not allowed combinations of electives

course code	course name	course code	course name
0BTE00	Advancing Light for Human Functioning – entrepreneurship in lighting	0HSAU0	Advancing light for human functioning
0HSUB0	Behavioral and social theories of human technology interaction	0HV10	Introduction Psychology and Technology
0HSUB0	Behavioral and social theories of human technology interaction	0HV80	HTI in social context
0LSUB0	Risk Trust and Social Media	0HV80	HTI in social context
0LSUB0	Risk Trust and Social Media	0HSUB0	Behavioral and social theories of human technology interaction
0SAUC0,0SEUB0,0SSUC0	USE leerlijn Patents, Design Rights and Standards	0ZK00	IPR and new ventures
1BK20	Business Process Simulation	2WB50	Stochastic Simulation
1BK60	Fundamentals of Algorithmic Programming	0HV120	Programming for P&T
1BTE00	Green business models	7XSUC0	Design for a sustainable future: specializing / Enterprise
1CK00	Deterministic Om	1CK200	Mobility and Logistics
1CK00	Deterministic Om	7W3X0	Mobility and Logistics
1CV00	Deterministic Om	1CK200	Mobility and Logistics
1CV00	Deterministic Om	7W3X0	Mobility and Logistics
1CV20, 1CV60	Stochastic Om	1CK200	Mobility and Logistics
1CV20, 1CV60	Stochastic Om	7W3X0	Mobility and Logistics
1JV00	Work & organizational psychology: basic (IE)	1JK00	Management of human behavior in organizations (Non IE)
1ZV20	Buying Behavior & Innovation (major IE)	0HV30	Social Psychology & Consumer Behavior
2DD50	Mathematics 2	2DI60	Stochastic operations research
2DD50	Mathematics 2	2WB20	Stochastische processen
2DE30	Signals and Mathematics	2DE40	Signals and Mathematics
2DF20	Stochastics and simulation for finance	2WB50	Stochastic Simulation
2DI90	Probability and statistics	5EMAO	Mathematics II
2ID40	Human Technology Interaction	2IOA0	DBL HTI + WebTech
2ID50	Datamodelling and databases	JBI050	Data management for data analytics
2ID60	Web Technology	2IOA0	DBL HTI + WebTech
2IIC0	Business Information Systems	1BV00	Business Modelling
2IL50	Data Structures	2IHA10	Algorithms and Data Structures
2IPD0	Software engineering and architecture	1BV10	Design of BIS
2IS50	Software Development for Engineers	2IP90	Programming
2IS80	Fundamentals of Informatics	JBI020	Foundations of Computing
2IS80	Fundamentals of Informatics	2ITX0	Applied Logic
2IT50	Discrete Structures	2IT80	Introduction to discrete structures
2IT50	Discrete Structures	2WF40	Verzamelingeleer en algebra
3AMX0	Mechanica	4DA00	Dynamica
4CA00	Signalen	2DE40	Signals and Mathematics
4CA00	Signalen	5ESE0	Signal processing basics (Signals I)

4CA00	Signalen	5ESA0	Signal processing basics (Signals I)
4DA00	Dynamica	5ASA0	Dynamics and Mathematics (AUT)
5AIA0	Computation for Automotive	5EAI0	Computation I
5ECB0	Electronic Circuits 1	DBB120	DBB120 Creative Electronics
5ESA0	Signal processing basics (Signals I)	2DE40	Signals and Mathematics
5ESE0	Signal processing basics (Signals I)	2DE40	Signals and Mathematics
5SEA0	Electrical energy phenomena & relations	2DE20, 5EPA0, 5ECB0, 5ESA0	SI-Energy
6A3X0	Voortgezette calculus voor scheikundige technologie	4DA00	Dynamica
7W8X0	Transportation engineering and Urban physics	7W9X0	Transportation engineering
8CA00	Bioinformatica	0HV120	Programming for P&T
8CA10	Programming and genomics	0HV120	Programming for P&T
DBB100	Creative programming	0HV120	Programming for P&T
DBB214	Program your break-out	0HV120	Programming for P&T
DDB120	Design for the User Experience	0HV70	OGO Qualitative Methods for observation, analysis and reporting
DZC40	Designing for an Active Lifestyle	DAAU20	Designing for PSV in a real-life Setting
JBC000	Creative thinking	0HV60	Thinking and Deciding
JBI010	Programming (Data Science)	0HV120	Programming for P&T
JBI020	Foundations of computing	JBI025	Foundations of computing
JBM030	Business Analytics 1	JBM035	Linear Optimization of Data Science
JBM070	linear Algebra and Data Science	JBM075	linear Algebra and Data Science

**Only for premaster students**

***Courses in this list can not be part of your bachelor program***

2DL00	Basiswiskunde
2DL03	Basiswiskunde
2DL04	Calculus A
2DL05	Calculus B
2DL06	Lineaire algebra
2DL07	Statistiek A
2DL10	Premaster calculus and probability
2DL20	Statistiek
2DL30	Statistiek
JBP030	Data-structures and Algorithms
JBP050	Foundations of Databases
JBP010	Introduction to Data Science
JBP040	Introduction to Machine Learning
JBP020	Programming