
SIEMENS
AZURSPACE
BLUEPOINT
AGORIA
DATS 24
BOREALIS
DUPONT
CadCorner
Cardolite
FUJITSU
Audi Brussels
AGORIA SOLAR TEAM
BRIDGESTONE
.AGORIA SOLAR TEAM


READY FOR THE
CHALLENGE?
WORLD SOLAR CHALLENGE
.AGORIA SOLAR TEAM
THE BELGIAN SOLAR TEAM IS RECRUITING!

CONTENT

HISTORY

2005

2009

2013

2017

2007

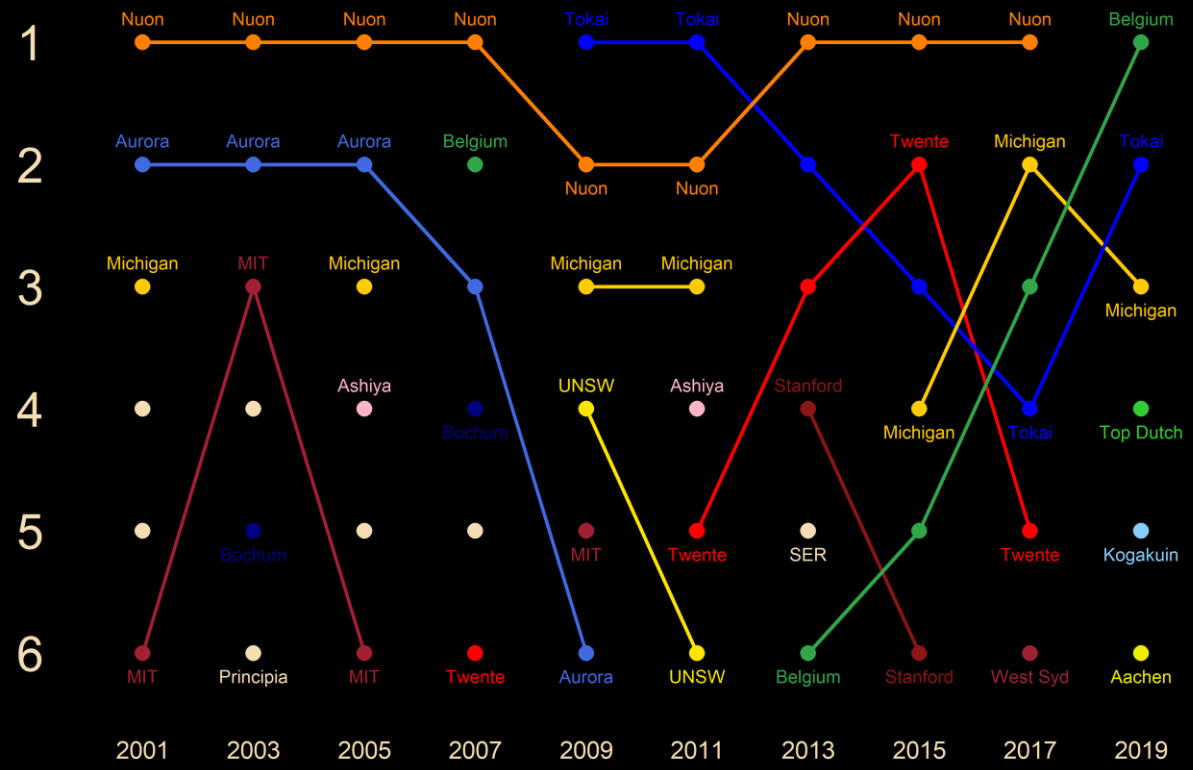
2011

2015

2019

World Solar Challenge – Top 6 since 2001

ScientificGems.wordpress.com



BY SCIENTIFIC GEMS

HISTORY

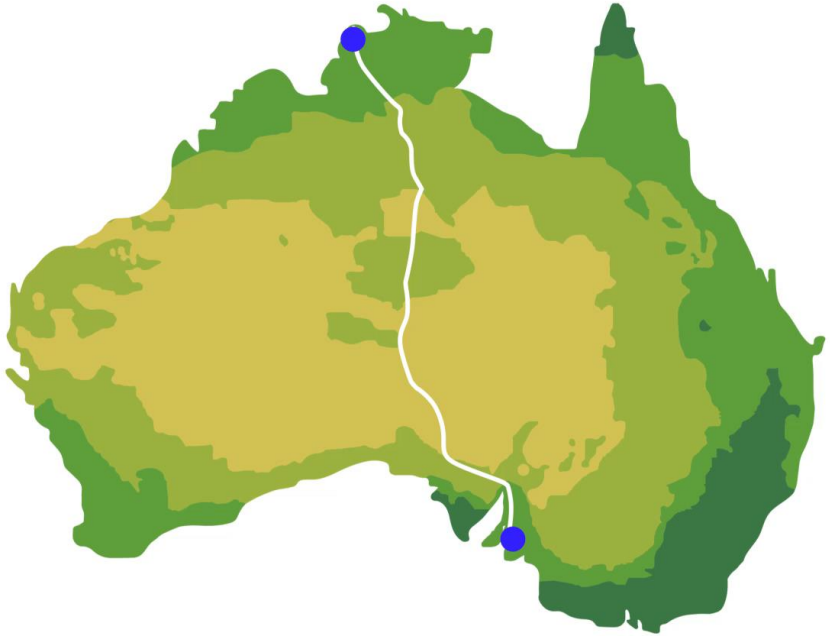

BRIDGESTONE
WORLDSOLAR
CHALLENGE


ESC
LUMEN EUROPEAN SOLAR CHALLENGE


ABU DHABI
SOLAR CHALLENGE
UNITED ARAB EMIRATES


CARRERA
SOLAR
ATACAMA®

THE RACE



BRIDGESTONE WORLD SOLAR CHALLENGE

Darwin to Adelaide

3021 km in ± 5 days

Every **2** years

Over 50 international teams

15 months to build a solar car

QUALIFIER

- 4th place
- Main competitors beaten
- New Belgian Record on Hidden Valley

DAY 1

- Took 1st place in 10 min
- Strategic speed
- Ended within seconds of 2nd and 3rd

DAY 2

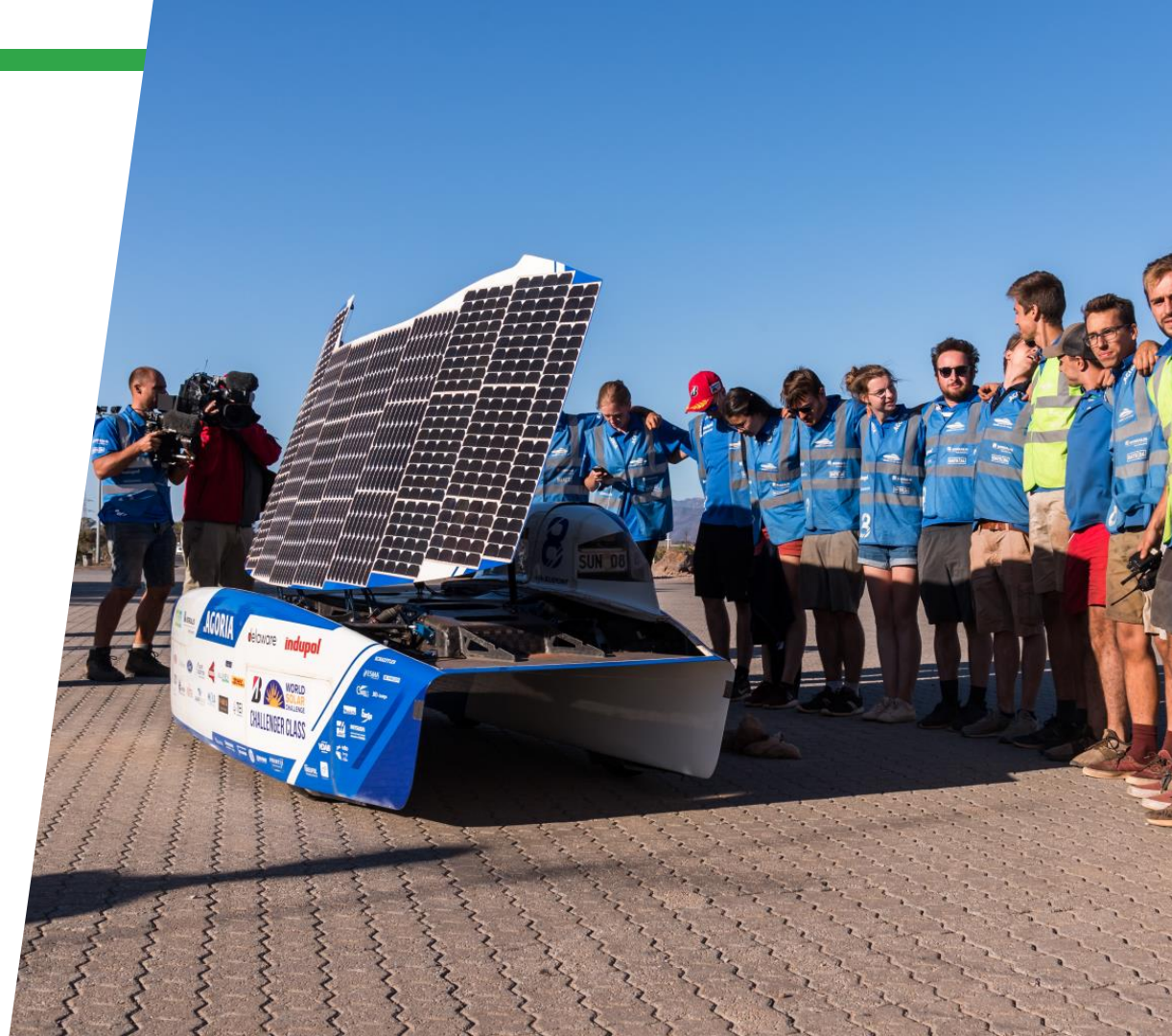
- Catch-up and overtake
- On the podium
- Camping along the road: flies everywhere

DAY 3

- Crosswinds and crabbing
- Technical difficulties
- Sandstorm

DAY 4

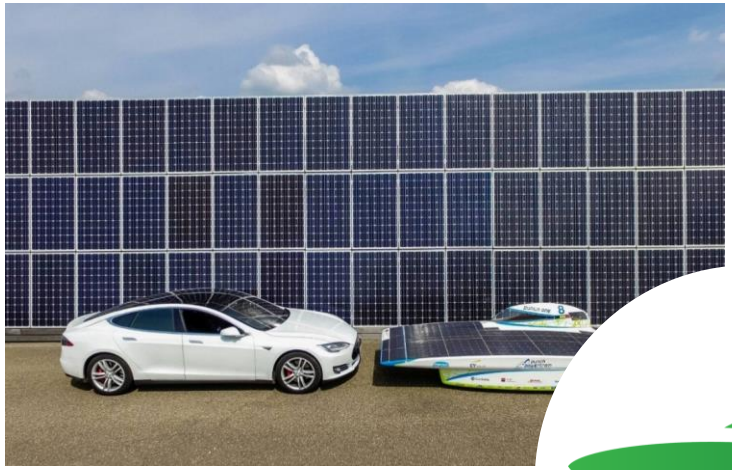
- Twente DNF
- Gap on Delft: 7 min
- Actually first due to control stop error



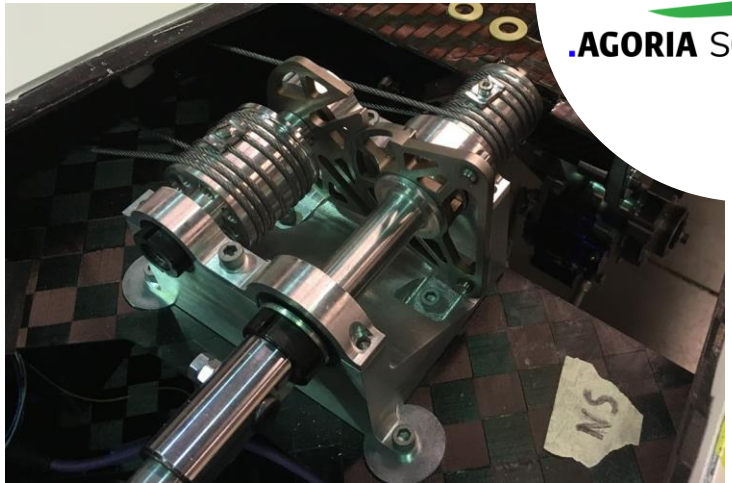
DAY 5

- Delft under pressure
- Finish first!
- Excess energy left in battery

THE PROJECT – SOLAR TEAM VZW

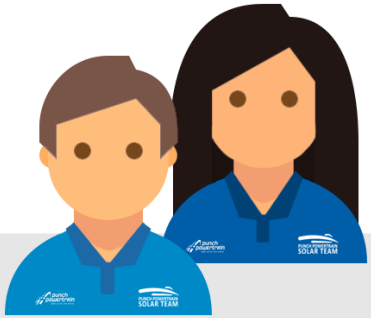


.AGORIA SOLAR TEAM




Solar
OLYMPICS
EDITIE 15
CONRAD
ELEKTRONICA
DRONE KOPEN
sparkfun
EOLY
LASER3000
EnerSys
imec

THE PROJECT - PHASES

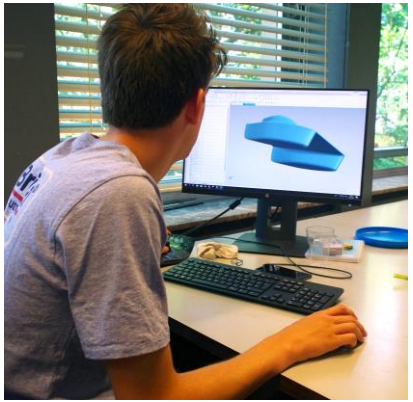


EXPLORATION

July – August 2020

DESIGN

September – December 2020



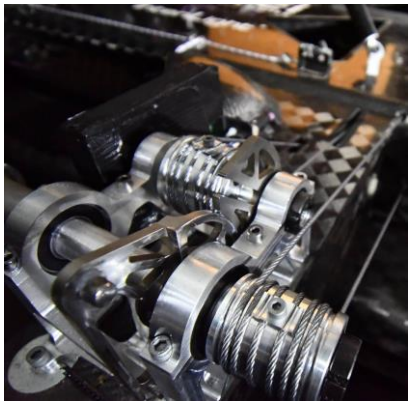
PRODUCTION

January – May 2021

THE PROJECT - PHASES

ASSEMBLY

May – June 2021

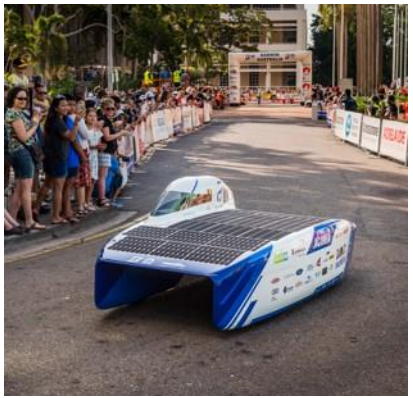


TESTING

July – August 2021

RACE DOWN UNDER

September – October 2021



THE PROJECT – WORK LOAD

- Starts off as a regular work week (9 – 18h) and free weekends
- 10 holidays throughout summer
- Gradually builds up
- Every (sub)department has its own busy periods

VICTORY!

October 21, 2021

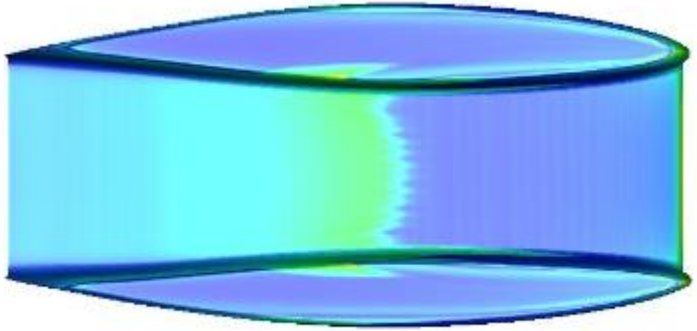

VACANCIES

VACANCIES

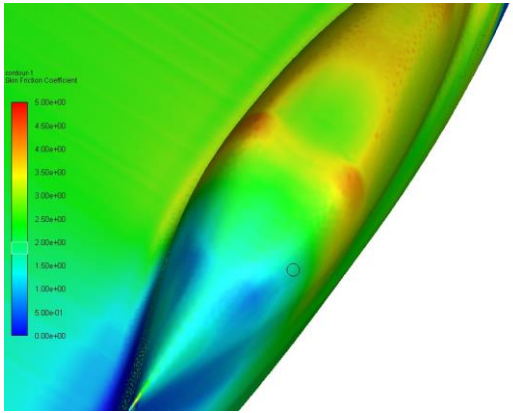
1. Aerodynamics
2. Mechanical Systems
3. Structural design
4. Production
5. High Voltage
6. Low Voltage
7. Race Strategy
8. Marketing
9. Logistics
10. Teamleader

AERODYNAMICS

- Design outer shell
- Design air flow across (rotating) wheels
- Limit internal airflow
- Wind tunnel validation



- 1 theoretical profile: manage mesh, simulations and results
- 2 practical profiles: produce CAD drawings



And also…

- Quality management @ production site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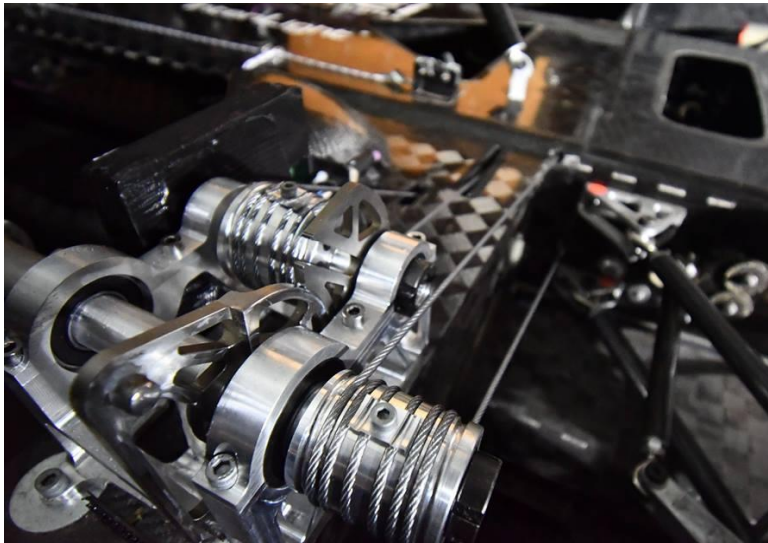
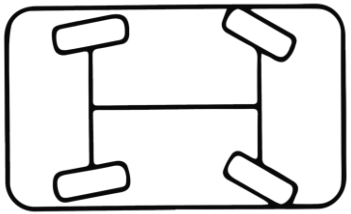
.AGORIA
DUPONT
KG. 5000

MECHANICAL SYSTEMS

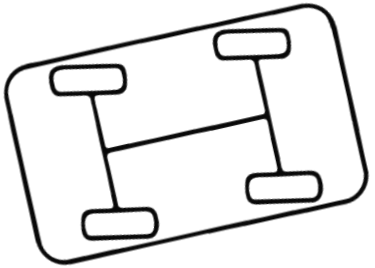
- Create the design space
- Design braking, crabbing, locking, steering, suspension, tilt systems and motor hub
  - Create CAD drawing
  - Simulate strength/stiffness
  - Integrate within the assembly
- Manage the assembly
- Innovate on stability, early-on testing…



TECHNICAL INNOVATION



FOUR WHEEL STEERING

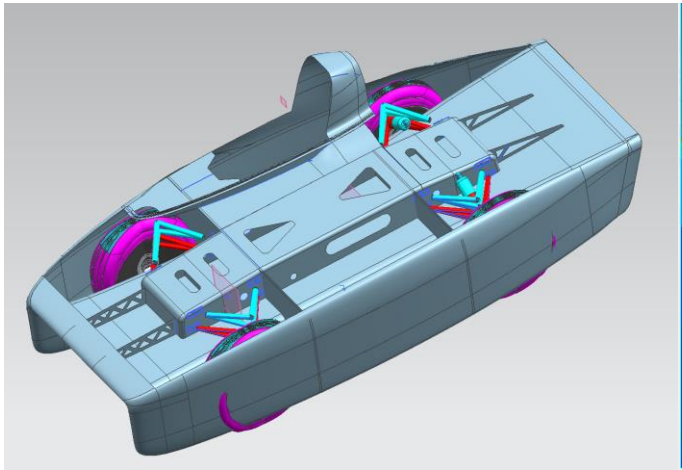


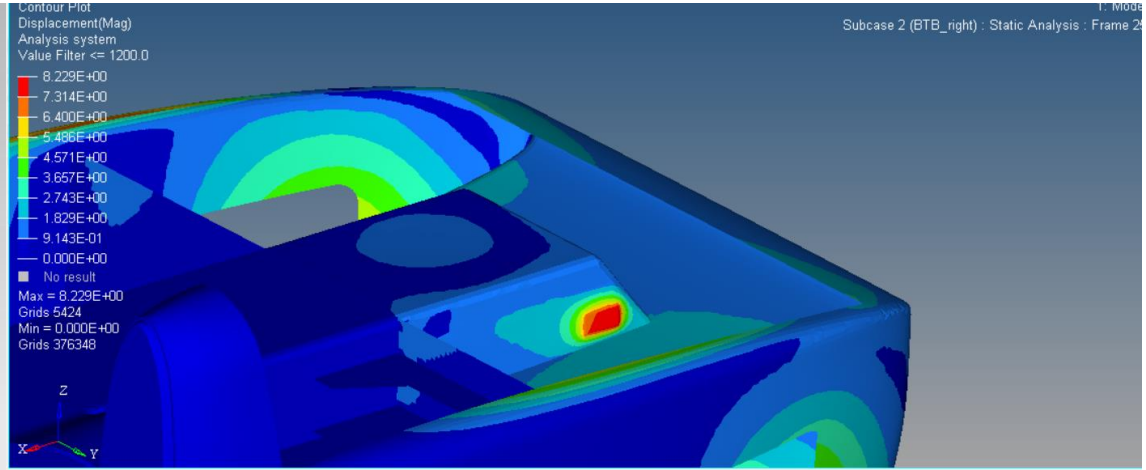
CRABBING SYSTEM

Technical Innovation Award at WSC 2017 and 2013

STRUCTURAL DESIGN

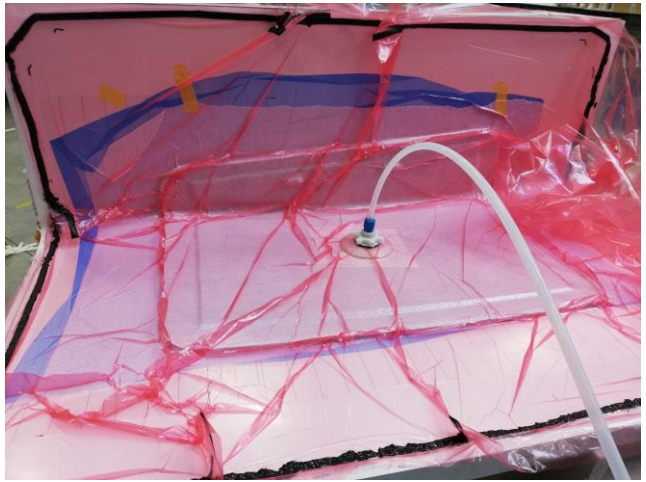
- Design the structure of the bottom shell, torsion box, top shell and canopy
  - Simulate required strength of the different components
  - Determine what materials used and where
  - Unfurl the 3D shape
- Be the structural expert @ production site

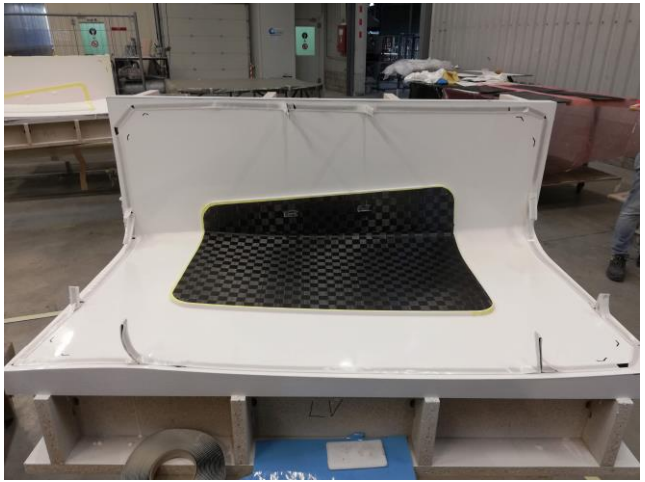




PRODUCTION

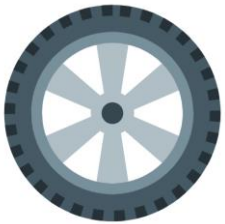
- Be responsible for the production of the next solar car
- Test different composite materials, glues, production processes…
- Create the moulds for the different structural components





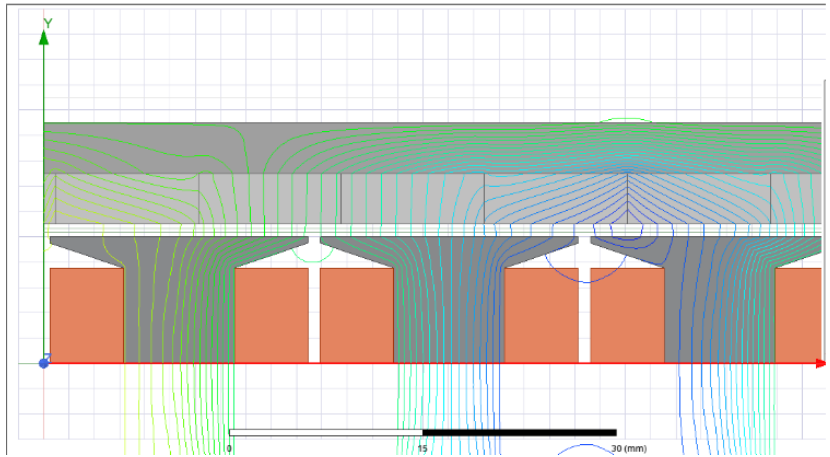
HIGH VOLTAGE

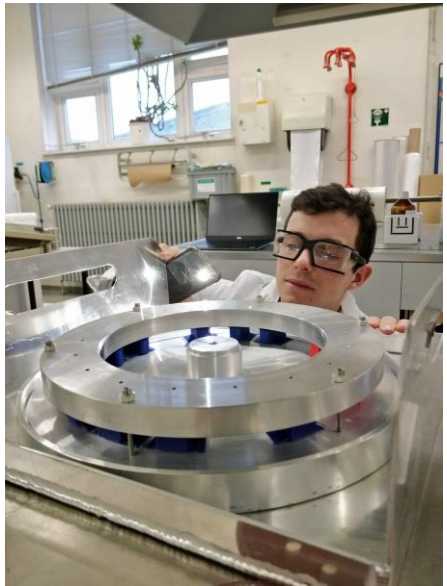
- Consists of three main topics
  - Design of electric motor
  - Design of solar panel
  - Design of battery pack



HIGH VOLTAGE - MOTOR

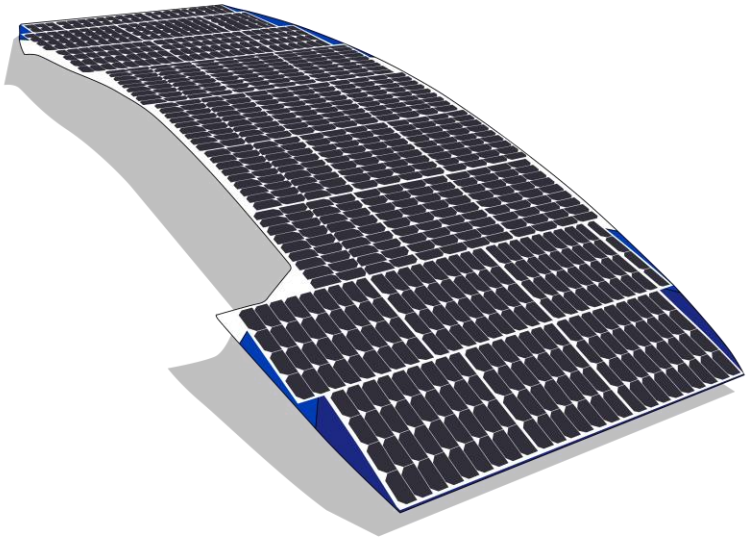
- Simulate electromagnetic field
- Determine configuration, select materials and construct motor
- Cooperate with Mechanical Systems for the mechanical design





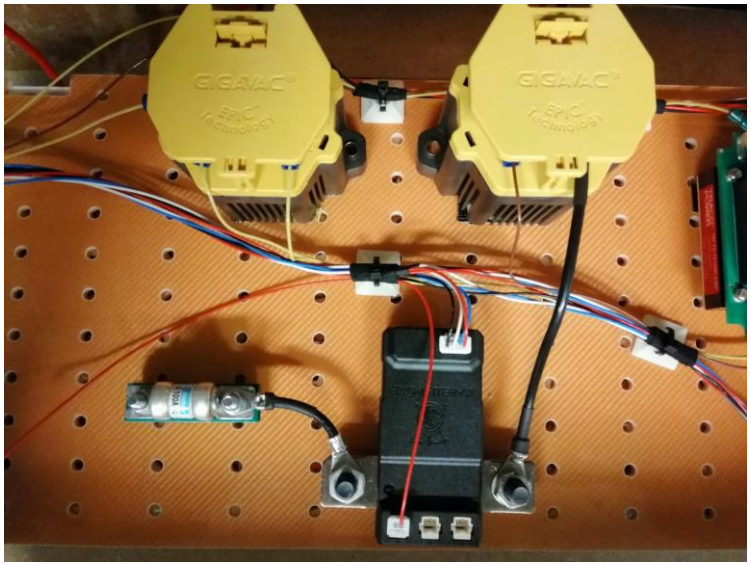
HIGH VOLTAGE – SOLAR PANEL

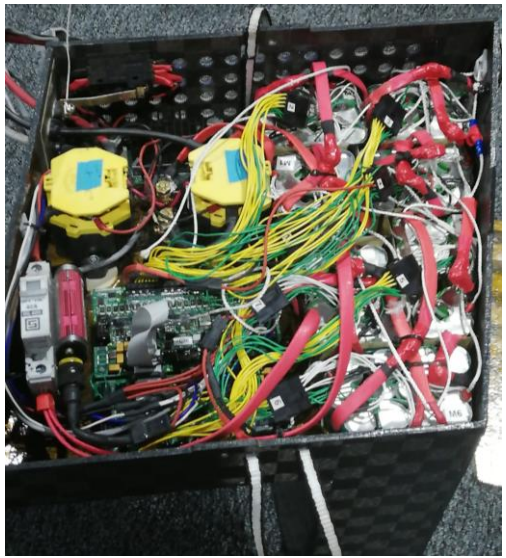
- Solar cell selection
- Determine optimal configuration in cooperation with Aerodynamics
- Produce solar panel



HIGH VOLTAGE - BATTERY

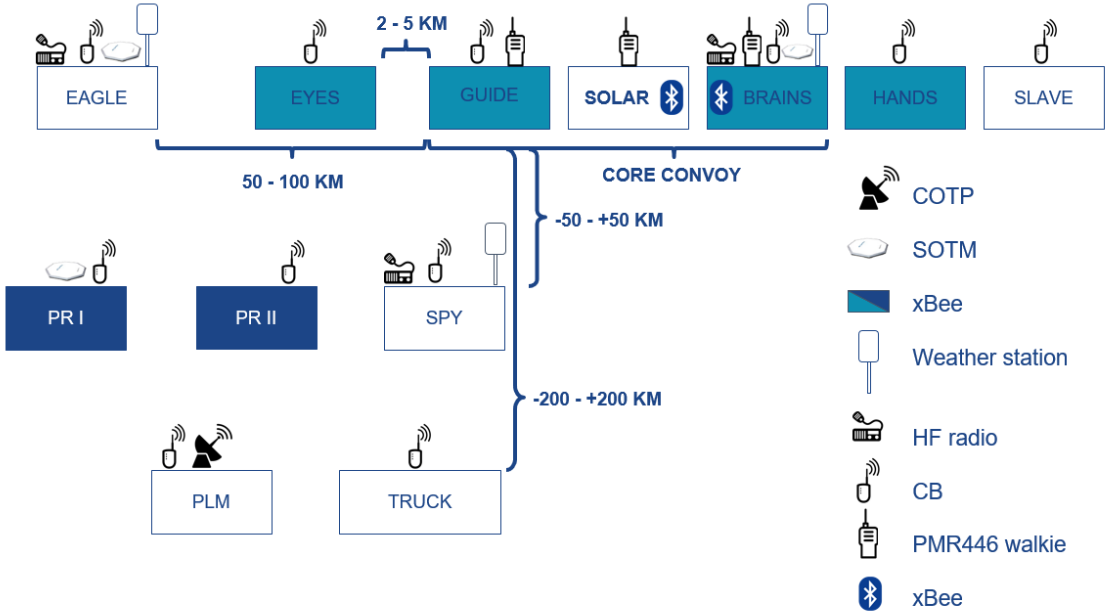
- Find the best cells available
- Create battery pack
- Improve Battery Management System
- Electronics battery pack

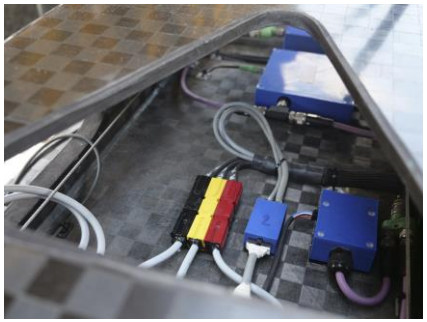




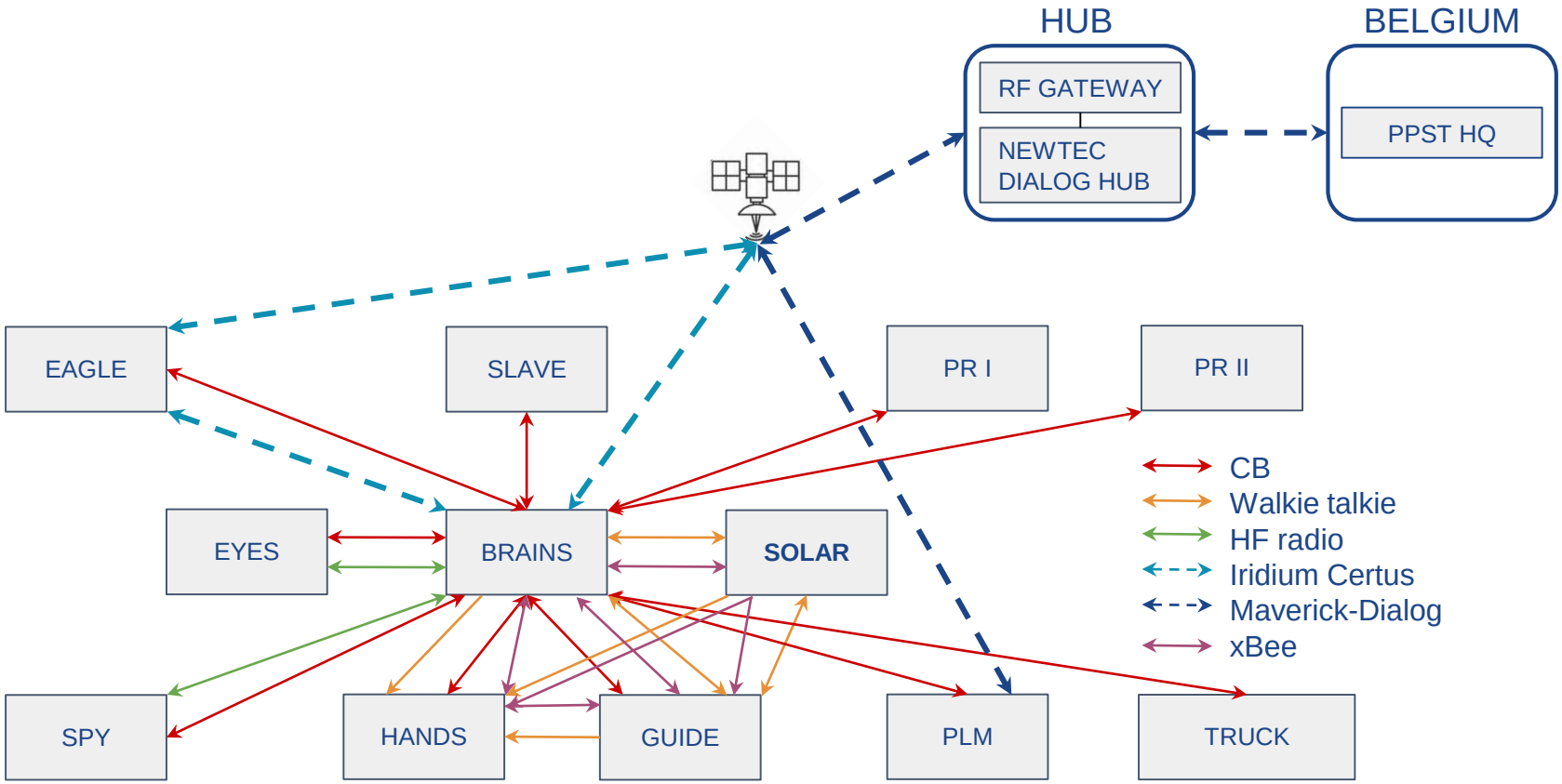
LOW VOLTAGE

- Improve existing low voltage systems
- Set up communication software solar car – convoy – convoy
- Design motorcontroller and monitoring system



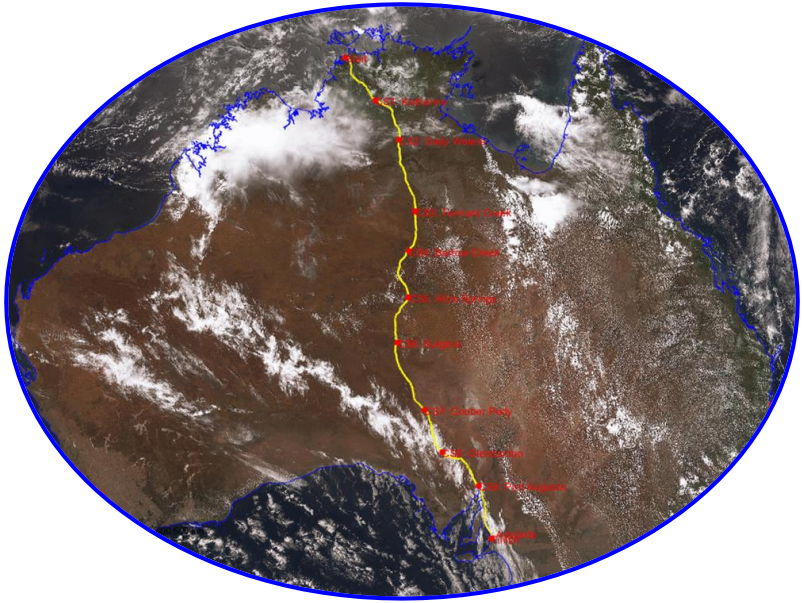


COMMUNICATION



RACE STRATEGY

- Defend a race focus within the team
- Improve existing strategy program
- Implement connection with monitoring software
- Expand satellite program/connection
- Improve existing outgoing/incoming power models



MARKETING

- Different topics
  - Business Relations
  - Events
  - External communications
  - Finance

- Everyone specialised in two topics

MARKETING – BUSINESS RELATIONS

- Develop a strong network in different industries
- Maintain and create new partnerships
- Being creative and combining technical skills and soft skills to acquire new partnerships
- Good communicator and listener, negotiator, diplomatic approach

AGORIA
BLUEPOINT Meet. Work. Tech.

BOREALIS Keep Discovering
DATS 24
delaware
indupol

ad INTERNATIONAL, ALLIMEX, Audi Brussels, AZURSPACE, CadCorner, Cardolite
Cromax, DHL, DUPONT, Ford, FUJITSU, MOLS HUURWAGENS
punch powertrain, SIEMENS, TEi COMPOSITES, umicore, ViRiX, winsol

BRIDGESTONE, cards, CEMATEC, Clarebout, DB VIDEO, DEUFOL, EnerSys
ESMA, FACOM, HAAS, hp, JIB design, Klarrio, KU LEUVEN, LECTRA
makita, MITSUBA, PRINTIX, SCHAEFFLER, SINGAPORE AIRLINES, VDAB, vito Energy Ville

acco, admatec, AED Studios, ALDOR, Altair, altropol, ALWA, Ambiphere, AMVR, AMW INDUSTRY, ANALOG DEVICES
APP, ANSYS, APEM, APEX DYNAMICS, Baumer, BELUMA, bernardustechnicum
bigHead, BLC, bonte ateliers, BRIDON-BEKAERT, c-mec, CADCAMATIC, capable, CEDRAT
CircuitZolder, clem, rood, CONRAD, CRAUWELS, CSS, DATAPRINT, datastories, DDMC event design
deforche, DEJOND, DELTAELEKTRONIKA, Diab, DOCKX RENTAL, DSV, ECC, Elmo

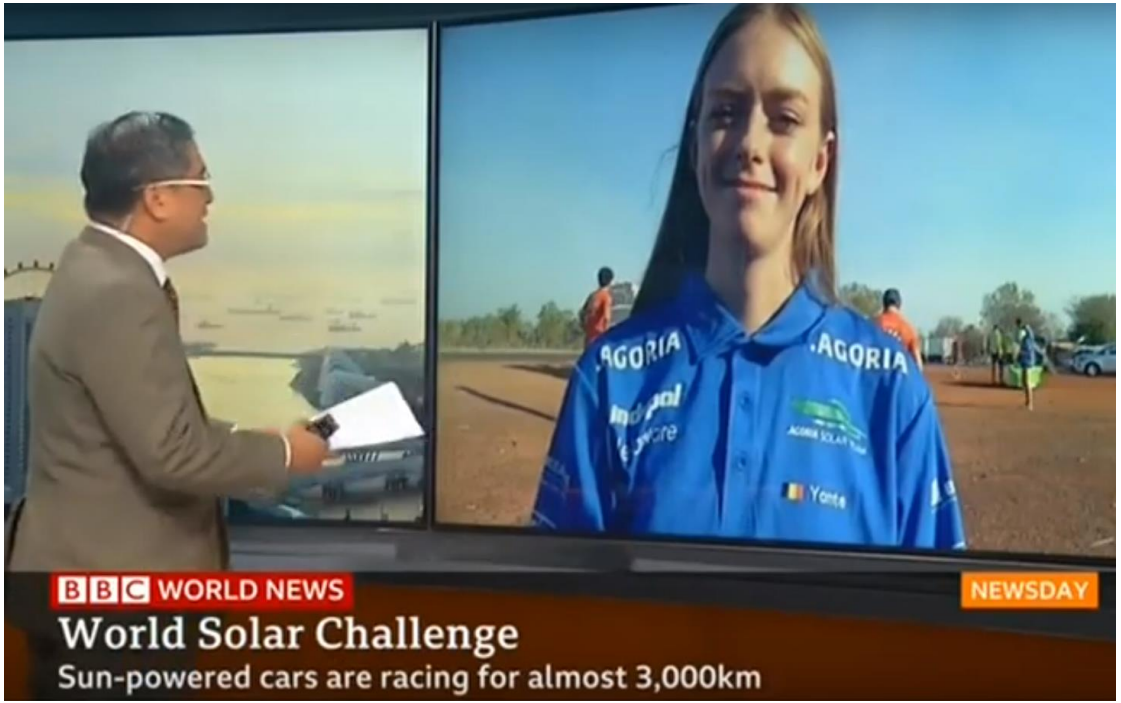
elobau, eNGIE, etilux, EURO CIRCUITS, EVONIK, EY
FABORY, Farnell element14, FEBIAC, FIT, MAKE, FONDATEL, FUTECH, gom, GOUDEZEUNE
GVS, Habilis, HAVEP, HEIDENHAIN, Henkel LOCTITE
Honeywell, IBA, igus, imec, INDUMAT, INTERLEUVEN, INUTEC
Engineered Polymers, Jeveka, KMI, KRAUS & NAIMER, KREKELS, KS
KU LEUVEN, LASE, LAPP GROUP, LED, Littelfuse, Lufft, LUMILEDS, MASTERVOLT
materialise, maxon motor, Melexis, MG Electronics, micro, Microstrain.io, molex, MOSA FREIN
MOUSER ELECTRONICS, msc, Nanotec, NATIONAL INSTRUMENTS, NAVEX ELEKTRO, Newtec, Nitto
Nussbaumer, PACIFIC, PEC, pixon, PHOENIX CONTACT, PMS 724, prezly
PRINCEFIBRE, PSSB, PROMISE, Reftech, ReporterStore, REXEL a world of energy
ROMAR-VOSS, OSCAR ROMERO COLLEGE, ROTERO, rycobelgroup, Schoeller Allibert, SCHRADER, Plasticor, SILTEX
SINGAPORE AIRLINES, sirris, SMC, SOCIAL SEEDER, SOL TECH, Sonal, Sortimo, STEWAL, stow
Suivo, TASMANIAN TIGER, TATONKA, TECHNOPOLIS, Tenco, tesa, TEVEMA, texco, TONES.BE
TONIK, TRACO POWER, TRIDEUS, TTL group, UNIFLY, UNIGLOBE Axon Travel, UNIVERSITEIT GENT, VACOMA
VAN HELDEN, VDH, VdSWEAVING, VELO, VERLOY, VERS-PORT, VIGO, VINK
VISIX, Vlaamse overheid, VLAAMS SUPERCOMPUTER CENTRUM, VOSSCHEMIE, VRT SANDBOX, VSL, VUB, WEB
WILLEMS M, Werfonline, WOODFORDTRAILERS, WÜRTH, YELLOW WINDOW, 3M, 4D RUBBER

MARKETING - EVENTS

- Organizing several events for partners in cooperation with Business Relations
- Organizing the Big Reveal of the next solar car, both for press and partners
- Organizing the Solar Olympics and Pitch Bootcamp
- Working together with leaders of the event industry (Location, Light, Sound, Catering, ...)
- Good communicator, creative, organizational mindset, negotiator

MARKETING – EXTERNAL COMMUNICATION

- Communication with press
- Managing the social media
- Building a story about the project



MARKETING - FINANCE

- Draw up the budget for the entire project
- Following up all expenses
- Responsible for accounting of the organization
- Being involved in all financial decisions

LOGISTICS

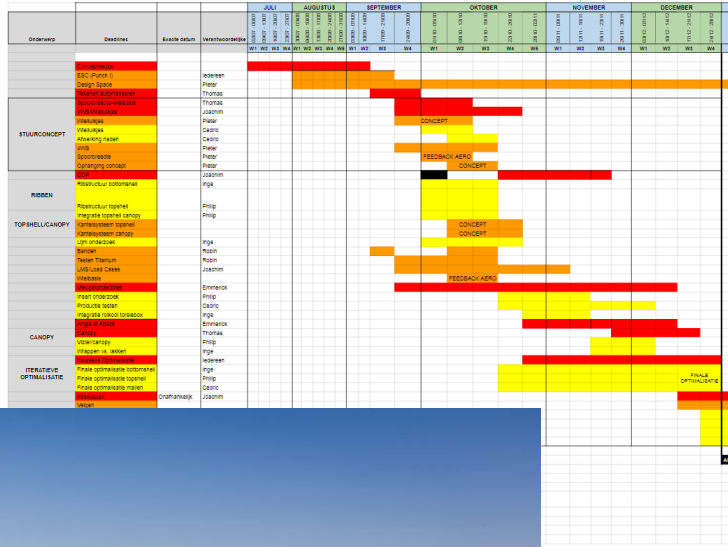
- Parttime function
- Head of small group
- Arrange transport of all goods and people to and from Australia
- Manage transportation in Belgium and Australia


DEVIFOL
BLUEPOINT
AGORIA SOLAR TEAM


NO PARKING

TEAMLEADER

- Manage a team of about 20 people
- Project management
- Help the team where needed
- Lead (technical) discussions/meetings



- People management
- Head of RvB
- Representation of the Solar Team

WHO?

YOU!

Engineering Science

Business Engineering

Engineering Technology

Master students or **graduates**

POSTGRADUATE

KU LEUVEN

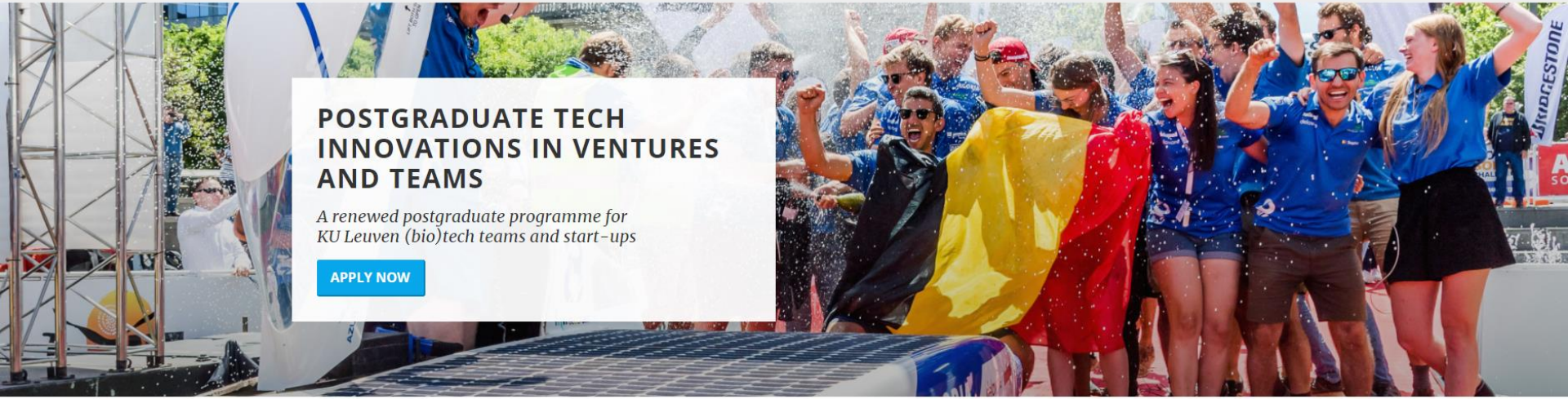
Search in KU Leuven

INFO

Log in

POSTGRADUATE TECH INNOVATIONS IN VENTURES & TEAMS

VENTURES & TEAMS | STUDY PROGRAMME | ADMISSION & FEE | APPLICATION | CONTACT US



WE ARE LOOKING FOR TECH TALENTS!

Are you an (almost) graduated science, engineering or technology student? Are you interested in the field of (bio)technological innovation and entrepreneurship? And are you seeking a unique and out of comfort learn and work experience?

Join one of our team projects or kick-start your own venture!

Pc

TEAM OR START-UP PROJECT

44 ECTS

Take the chance to participate in a team project or to pre-start your own venture. You will work in the team or on your business idea for the whole academic year to:

- develop entrepreneurial and business skills
- really design, develop en implement innovative (bio)technical systems
- grow as a person and as a professional
- get experienced in collaborating and communication with students and professionals from different background.

TECHNOVATION HUB ACADEMY

Minimum 6 ECTS

Together with the organisation Technovation Hub we'll offer you customised and hands-on workshops on e.g. product design, digital marketing, accountancy, legislation, etc.

All workshops are led by inspiring and experienced professionals from industry.

In collaboration with

TechnovationHub

OPTIONAL COURSES

Minimum 6 ECTS

Select courses out of the full range of offered KU Leuven courses (technical as well as non-technical).

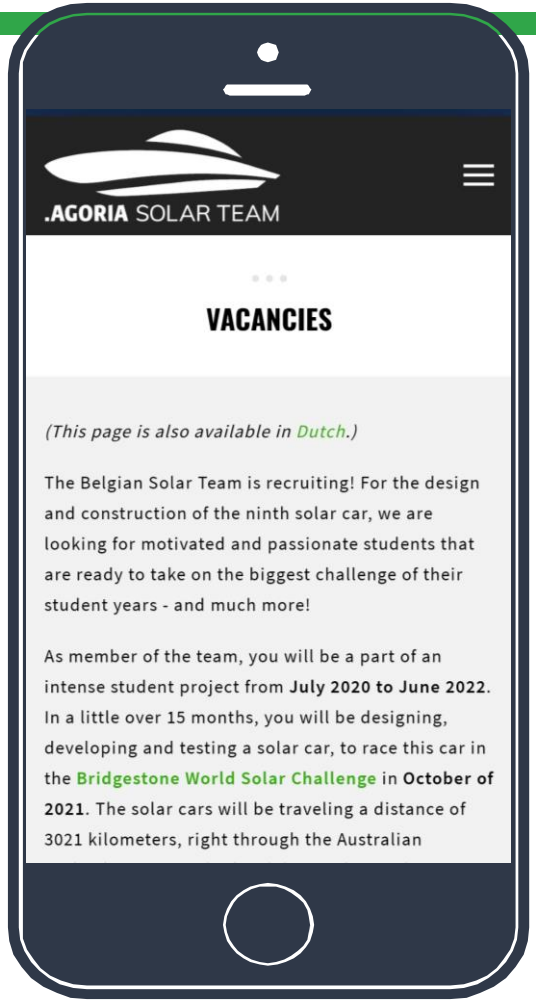
This can be courses within your own domain of expertise or from totally different fields. You select these courses based on your personal interests and based on the skills or knowlegde you need for your (team) project.

HOW?

Send your **CV** and **motivation letter** to recruitment@solarteam.be

Deadline: March 1, 2020

solarteam.be/vacancies



WHAT NEXT?

Apply before **March 1, 2020**

Go through 3 selection rounds

Selection in April 2020

Start of project on July 2, 2020


Grab a drink!