

REVOLVE NTNU



FRA 0-100 PÅ 8 MÅNEDER



TEORI I PRAKSIS

Revolve NTNU akselererer studenter til å bli ingeniører og ledere i verdensklasse



OPPSKRIFT PÅ 1 STK RACERBIL:



70 STUDENTER



8 MÅNEDER



6000 DELER



18 FAGRETNINGER



150 000 TIMER



KJERNEVERDIER



DEDIKERTE



AMBISIØSE



INNOVATIVE



PROSJEKTÅRET

SEPTEMBER
Oppstart av nytt team

OKTOBER
Konsept-fase

NOVEMBER
Design-fase

JANUAR - FEBRUAR
Produksjon

MARS - APRIL
Produksjon

MAI
Avduking

JUNI - JULI
Testing

AUGUST
Konkurransse

OPPSTART AV NYTT TEAM



2 ukers "bootcamp"

Monday 18th of September										Wednesday 13th of September																			
What: How to Spore Who: Ingrid Where: VG13										What: Walk around of Lyrå and Aurora Who: Arneud + Nigg Where: Verksted																			
What: How to Spore Who: Ingrid Where: VG13			What: Software lunch Where: Sidan			What: How to concept Who: St. Visdøl Where: VG13				What: Marketing lunch Where: Vestast		Getting to know your systems. Speak to relevant alumni		Get to know your system's tasks on conference talk to relevant alumni		What: Planning Who: Brage Where: VG13		What: Concept, planning and development - introductory course Who: Fern Where: Digital		What: Work on own system. Who: Ailo Where: Mekskontor.		What: Aero-CAD Who: Arund Where: David		What: Work on your system and do tasks Who: Iker Where: Mekskontor		What: Work on own system and talk with alumni. Do tasks Who: Iker Where: Mekskontor		What: Individual work Who: Main Where: Office	
What: How to concept Where: With meik			Get to know your system's tasks on conference talk to relevant alumni			What: Areas mono. Who: Ole Where: Vassbygget 315				What: Office group Who: Main Where: Office		Getting to know your systems. Speak to relevant alumni		What: Walk around of Lyrå and Aurora Who: GL + Arund Where: Verksted		Clarification of expectations individually. Get to know your system's tasks on conference talk to relevant alumni		Clarification of expectations individually. Get to know your system's tasks on conference talk to relevant alumni		Clarification of expectations individually. Get to know your system's tasks on conference talk to relevant alumni		What: CAD 201 and workshop Who: Jonas, L'Etienne or alumni. Tobias 1vite Where: Meik		What: Clarification of expectation Who: Main Where: 3.15					
What: Start Concepting Who: Wilhelm Where: Kano/Meik			What: Start Concepting Who: Mads Where: Kano/Meik			What: Aero pose processing course concepting and design				What: Design for manufacturing Who: Lasse Where: VG21		What: Design for manufacturing Who: Lasse Where: VG21		What: Design for manufacturing Who: Lasse Where: VG21		What: Fales seminar II Who: Main Where: Office		What: Fales seminar II Who: Main Where: Office		What: Fales seminar II Who: Main Where: Office		What: Fales seminar II Who: Main Where: Office		What: Fales seminar II Who: Main Where: Office		What: Fales seminar II Who: Main Where: Office			
What: Fales seminar II Who: Main Where: Office										What: Racecar 101 - Vehicle Dynamics and Aerodynamics Who: Torbjørn & Bo Where: Valgrinda VG.1																			
What: CS + Marketing + Embedded + Chassis + AS AS pre-kort (1 head covered by Revolve) Where: Bowling 1 Who: Markus, Isabel, Mads, Main & Jonas			What: CS + Marketing + Embedded + Chassis + AS AS pre-kort (1 head covered by Revolve) Where: Bowling 1 Who: Markus, Isabel, Mads, Main & Jonas			What: CS + Marketing + Embedded + Chassis + AS AS pre-kort (1 head covered by Revolve) Where: Bowling 1 Who: Markus, Isabel, Mads, Main & Jonas				Read 10 rules from tests before next day!		What: CS + Marketing + Embedded + Chassis + AS AS pre-kort (1 head covered by Revolve) Where: Bowling 1 Who: Markus, Isabel, Mads, Main & Jonas		What: Ping-Pong Tournament Where: Ping Pong		What: Group social - building Who: Markus		What: CAD 201 and workshop Who: Jonas, L'Etienne or alumni. Tobias 1vite Where: Meik		What: CAD 201 and workshop Who: Jonas, L'Etienne or alumni. Tobias 1vite Where: Meik		What: CAD 201 and workshop Who: Jonas, L'Etienne or alumni. Tobias 1vite Where: Meik		What: CAD 201 and workshop Who: Jonas, L'Etienne or alumni. Tobias 1vite Where: Meik					
Tuesday 19th of September										Thursday 14th of September																			
What: How to concept Who: Elise Håve Where: 315										What: Lunch Where: Office + VG13 Who: Board																			
What: work on own system Who: Wilhelm/Arund Where: Meik			What: work on own system Who: Wilhelm/Mads Where: Kano			What: Composite course Who: Simon Skarandevig Where: Vassbygget 315				What: How to social Who: Mads Where: VG21		What: AS Control and Vehicle Interface Where: 315		What: Aero Post-processing dev. Who: Magnus Strand Where: 7		What: Work on own system. Who: Arne Where: Mekskontor.		What: Go through the project plan Who: Iker Where: VG13		What: Speak to relevant alumni Who: Main Where: Office		What: Speak to relevant alumni Who: Main Where: Office							
What: Group expectations Who: Wilhelm Where: Datsal 2			What: Group expectations Who: Mads Where: Datsal 1			What: Start concepting Who: Kano Where: Kano				What: Preparing for sailing sponsors Who: Joachim & Emma Where: VG13		What: How to MegMug Who: Tobe Where: VG13		What: Work on own system Who: Arne Where: Mekskontor.		What: Aerodynamics 201 (Rules and Design) Who: Ludwig/Hakon Where: Workshop		What: Work on your system and do tasks Who: Iker Where: Mekskontor		What: Two afternoon marketing storage Who: Main + Mia Where: Marketing storage		What: Two afternoon marketing storage Who: Main + Mia Where: Marketing storage							
What: Start concepting Who: Sura Where: Kano			What: Start concepting Who: Kano Where: Kano			What: Work on concept Who: alle Where: Mekskontor.				What: Work on own system and plan your present your post to alumni Who: Main Where: Office		What: Vehicle dynamics 102 Who: Torbjørn Smith Where: 315 + Vassbygget (må bookes)		What: Work on own system/head design doc Who: Magné Where: Mekskontor		What: Work on your system and do tasks Who: Iker Where: Mekskontor		What: Prepares for social. Who: Håve Where: Home		What: Prepares for social. Who: Håve Where: Home		What: Prepares for social. Who: Håve Where: Home							
What: Motivational presentation Who: Stein Pettersen (Formel 1 kommentator) Where: VG1										What: Mark + Marketing social (Fluskyball i Hagakirksparken) Where: Hagakirksparken Who: GL +																			

KONSEPT-FASE

Hva skal på bil?



TID



PENGER



GAINZ



DESIGN-FASE

Sketch og
kravspesifikasjoner

Starter i CAD

FEM-modeller og
optimalisering

Ferdigstiller i CAD

Lager maskintegninger

Sender filer til
produksjon

Kontinuerlig
oppfølging

PRODUKSJON

"Nå gønner vi maks"



LOGISTIKK



RELASJONER



TEAM



TESTING

“Test Crew Summer”



DATA



TILPASNINGSEVNE

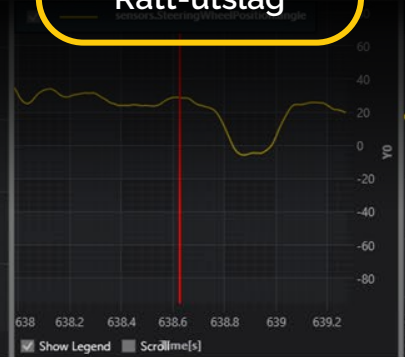


VILJESTYRKE

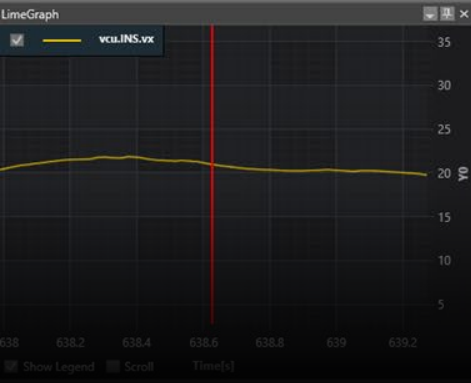




Ratt-utslag



Pedal-posisjon



Inverter



Torque vectoring





KONKURRANSE.....



France
 ↳ Fission Power
 ↳ Central

Start-up costs
 Material:
 Infrastructure:
 Workers: 20 special workers (33,23€)
 10 special workers (43,26€)
 5 maintenance workers
 100 work hours per year

General costs
 Utilities:

Supplier -> Buy it
 Parts

STANDARDS

150 9001 - Quality
 150 14001 - Environmental impact
 150 26000 - Social Responsibility



FORMULA STUDENT

SIEMENS



1000

UNIVERSITETER



INDUSTRIEN




KOMPETANSE




Country Norway
Class Formula Student Electric




PRESTASJONER

 FS Austria

 Sammenlagt

 Skidpad


 FS East

 MV Autocross

 DV Acceleration


 MV Skidpad

 MV Acceleration

 FS Germany

 Sammenlagt

 Efficiency

 Endurance

 MV Skidpad

HVORDAN SKAPE ET VINNERTEAM?



1 EIERSKAP

2 KOMMUNIKASJON

3 MOTIVASJON