Survey

Mining Engineering Projects

at the University of Mons, Belgium

(Translated from French to English)

Number of participants : 10

Which projects ?

The survey deals with :

- The geomecahnics project (B3)
- The practical works in Analytical and Numerical Modelling in Rock Mechanics (M1);
- The practical works in Design and Construction of Workings (M1);
- The mine planning project (M2).

Question 1

Did the projects develop your ability to identify and describe problems for engineers ?

Yes	100%	10 votes
No	0%	0 votes

Yes – Comments (7)
I could see the complexity of a project and all the norms that have to be respected.
Yes because it allowed me to better understand the difficulties and the time required.
I would say that all this helped for scientific approach, in describing a problem and proposing a methodology for a solution.
It allowed to understand how, in practice, theory is applied and all the difficulties that are related to this application.
Real situation.
It allows to set in practice abstract theoretical knowledge. We see the impact that we van have in the real world with our knowledge.
No - Comments (0)
No comment for this answer

Question 2

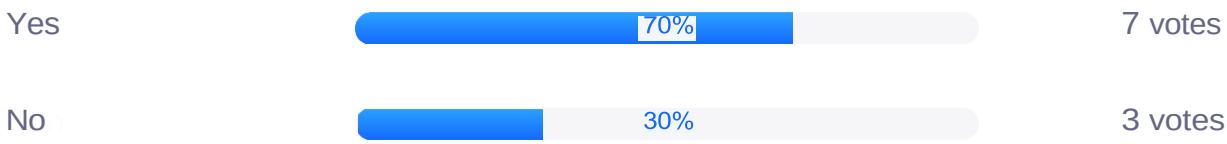
Did the projects develop your capacity to plan your work, create a list of tasks, identify resources ?

Yes	100%	10 votes
No	0%	0 votes

Yes – Comments (5)
Yes, I learned not to postpone my work and respect the planning.
Yes, it gave me a better ability for teamwork organization.
Mainly for teamwork, we had to organize ourselves, knowing who is doing a given task and identify deadlines.
Teamwork, limited time, limited material/budget
Planning our work is not obvious but it is a skill that we need to develop, with given deadlines. Keep intermediate deadlines for future projects.
No - Comments (0)
No comment for this answer

Question 3

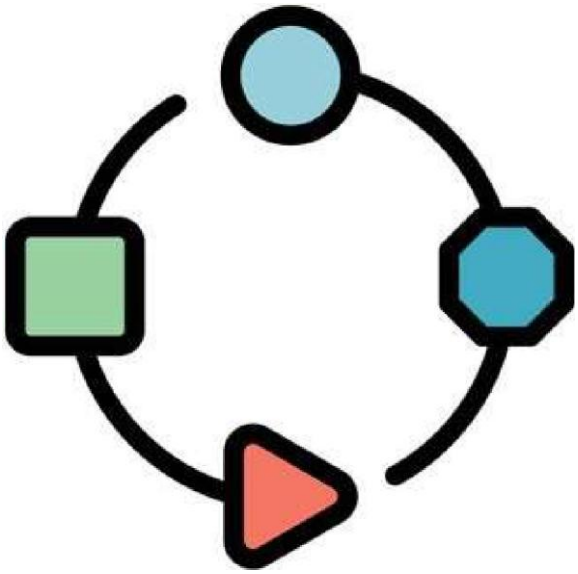
Did the projects develop your capacity for bibliographic research based on specifications ?



Yes – Comments (2)
I could make additional bibliographic research to develop new knowledge and hence skills.
We discovered tools like Google Scholar, scientific journals to provide information in relation with our projects.
No - Comments (2)
I was already used to look for documentation.
I do not think that I am better in bibliographic research now.

Question 4

Did the projects develop your capacity to adapt your approach of the problem once you get a feedback from the staff ?



Yes	100%	10 votes
No	0%	0 votes

Yes – Comments (5)
Yes, feedback helped me to improve my work.
I had to be more straightforward, more assertive, and explain clearly my ideas.
A lot
Feedbacks redirect us when we are going in the wrong direction.
Teachers and assistants regularly provide feedback if we ask them. It really helps improving the quality of our work and reports.
No - Comments (0)
No comment for this question

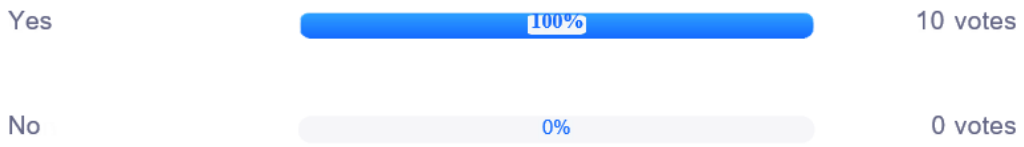
Question 5

What are the main difficulties that you feel about mining engineering projects?

Use the appropriate terms
Use the right scientific terms because we are not yet familiar with the fields of geology and mining engineering.
Understanding some concepts from the course to apply them to a practical case study
Time management, writing a scientific report and… my colleague 😉
To realize that what we see in theory is much more simple than practical cases
Understanding the meaning of laboratory tests and data to process. It is sometimes difficult to make the link between the laboratory and what is happening in the field.
Managing the amount of work, writing a professional report
Organise the work inside the group, manage the quantity of work, sometimes surpassed by the quantity of work
Getting familiar with the tools (laboratory devices, softwares) that we use for the first time
Writing a clear scientific report

Question 5

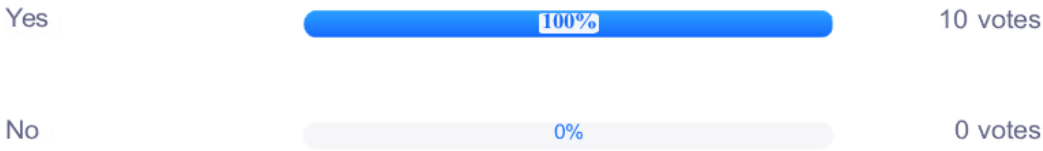
Did the geomechanics project helped in understanding the course Mechanical Behaviour of Geomaterials?



Yes – Comments (6)
We could “visualize” each term of the constitutive law
Yes, the project was a practical case that helped to understand the course
A lot
It really helped to understand the meaning of each laboratory test, and the reason for performing a geomechanical investigation
Much better! The course is very difficult but everything seems much clearer after the project. Performing laboratory tests is really instructive in comparison with theory
100%
No - Comments (0)
No comment for this question

Question 6

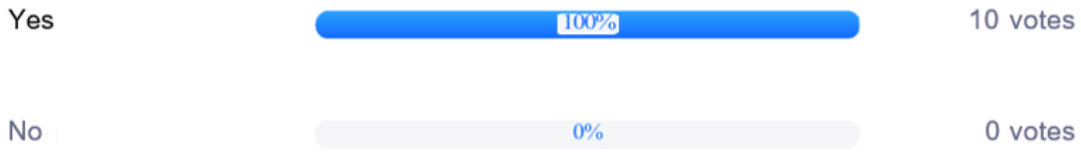
Did the practical works in “Modelling” helped in understanding the course ?



Yes – Comments (4)
Yes, they are good examples for understanding the course
Following the same principle as for geomechanics project, it allowed to understand and deepen several abstract concepts. Advantage: it happens before the assessment so it really helps for studying
It allows to play with formulas that would otherwise keep very abstract.
Less than the geomechnics project but still very helpful to examine the results that we get from numerical simulation and interpret them.
No - Comments (0)
No comment for this question

Question 7

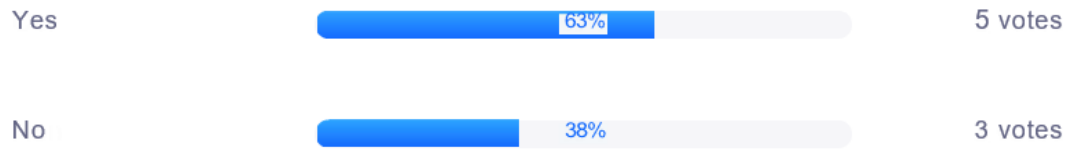
Did the practical works in “Design and Conception” helped in understanding the course ?



Yes – Comments (3)
Yes, it is a good practical case that helped me to better understand the course.
The practical works allow to apply “in reality” the knowledge of the course. The course already includes a lot of examples but it is a useful complement.
Idem as “Modelling” and the discussions that we have allow to deepen some topics.
No - Comments (0)
No comment for this question

Question 8

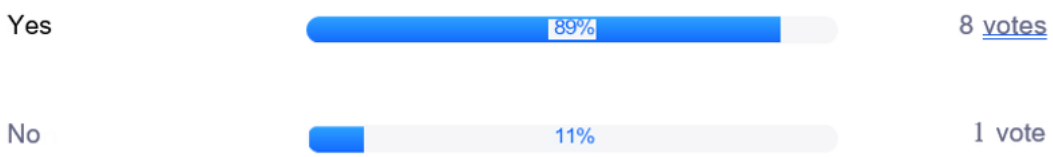
Did the projects in mine planning helped in understanding the course ?



Yes – Comments (3)
Yes, those projects were good practical cases that helped to understand the course
(I did not followed this course)
I do not know
No - Comments (1)
I did not followed this course

Question 9

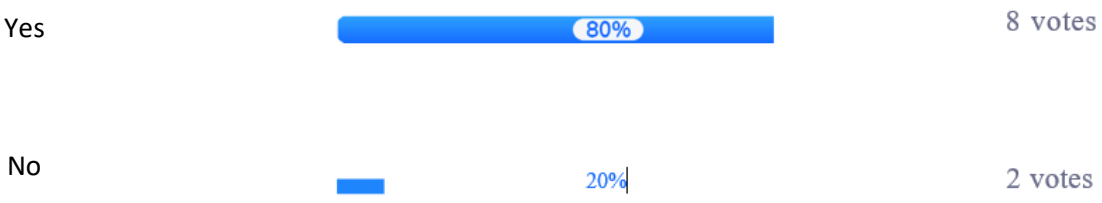
Did the geomechanics project helped you to connect courses together ? Which ones?



Yes – Comments (5)
Geotechnics
Material science, geotechnics, general and structural geology
It creates connexions between the mechanical behaviour of geomaterials and the geological context of the project
Geology, structural geology, behaviour of geomaterials
The courses of rock mechanics, geology, structural geology
No - Comments (0)
No comment for this question

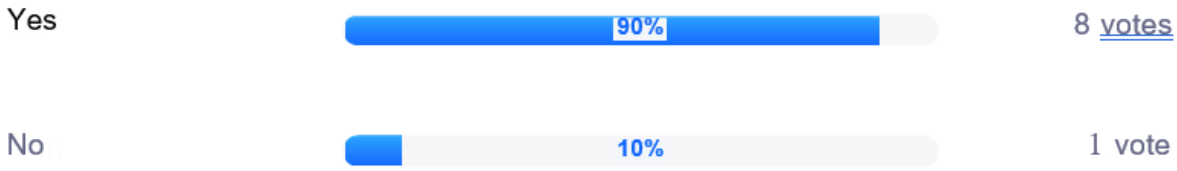
Question 10

Did the practical works in “Modelling” helped you to connect courses together ? Which ones?



Question 11

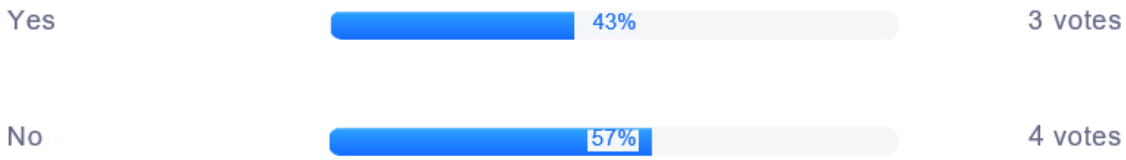
Did the practical works in “Design and Construction” helped you to connect courses together ? Which ones?



Yes – Comments (6)
Design and construction of underground works
Analytical and numerical modelling
Between the geomechanics project and the conception of workings
Modelling, rock mechanics, geotechnics, mining, general geology, structural geology
Modelling, conception, mining
Yes, modelling in rock mechanics and conception and design of workings
No - Comments (0)
No comment for this question

Question 12

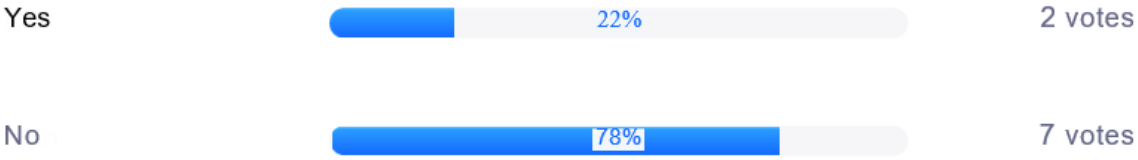
Did the mine planning project helped you to connect courses together ? Which ones?



Yes – Comments (1)
(I did not yet followed this course)
No - Comments (1)
(I did not yet followed this course)

Question 13

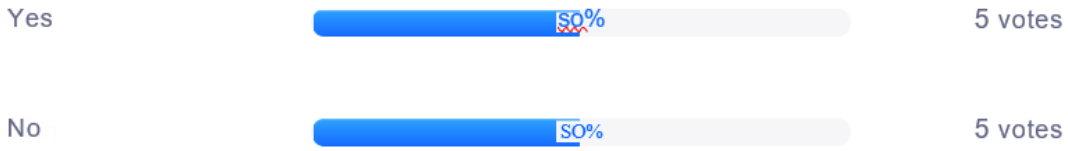
Did the projects in mining engineering helped you to better understand other courses (in the common curriculum)? Which ones?



Yes – Comments (1)
Material science
No - Comments (1)
None

Question 14

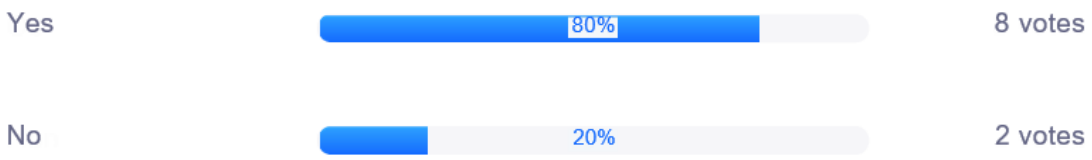
Is the time allocated to projects enough for the proposed problems?



Yes – Comments (2)
Project is time consuming and we have to rush for some parts
Not too long, not too short
No - Comments (5)
Starting earlier could be better
It is almost right. We just have a lot of exams during the same period. In B3, we were too numerous in the lab and it slowed us down. If we had less courses, it would be great
Most of the time, it is almost fine. Ofter, we are just missing a short extra time. 2 extra sessions would be great.
It depends on the project.
Sometimes, I did not had difficulties to understand the projects but to explain my work

Question 15

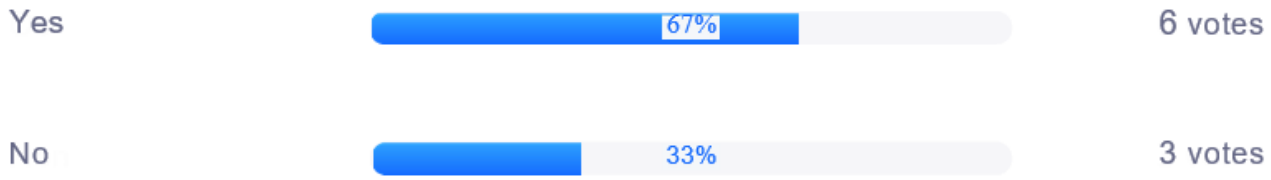
Did you improve your communication skills during the projects?



Yes – Comments (4)
Yes, my communication with the group was improved
Distributing the tasks, discussions with colleagues, putting our results together, thinking together
Oral presentations, reports
Improvement for oral presentation and reports
No - Comments (1)
No improvement

Question 16

Did you improve you capacity for teamwork during the projects ?



Yes – Comments (2)
Yes, same as before
Yes but it could be fine to change the teams between B3 and M1
No - Comments (2)
The team is still small to really improve this aspect
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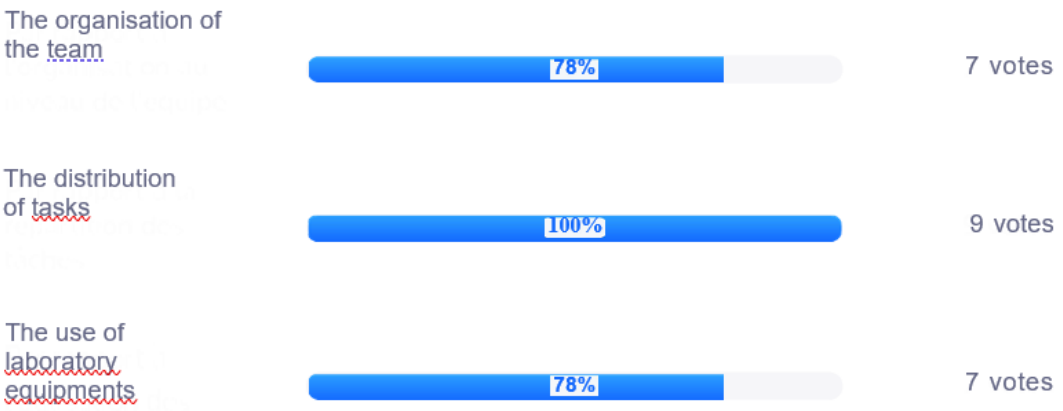
Question 17

Is the size of the groups suited for …



The organisation of the team – Comments (5)
Not too many people to manage, it is perfect because everyone feels concerned
Nothing to say
Yes
It depend if all the members of the team feel involved. With 3 students for a group, you can really feel working alone
M
The distribution of tasks - Comments (5)
We can work all the 3 of us on a task and progress in several directions
Everybody is doing something. People are not overloaded
Yes
Idem as for the organization
M
The use of laboratory equipment – Comments (5)
It would be great if there were less groups but 3 people in a group is the right size for performing tests
The problem is mainly due to the amount of teams than the amount of people. It changes a lot from year to year.
No
The amount of students is enough for laboratory tests
S

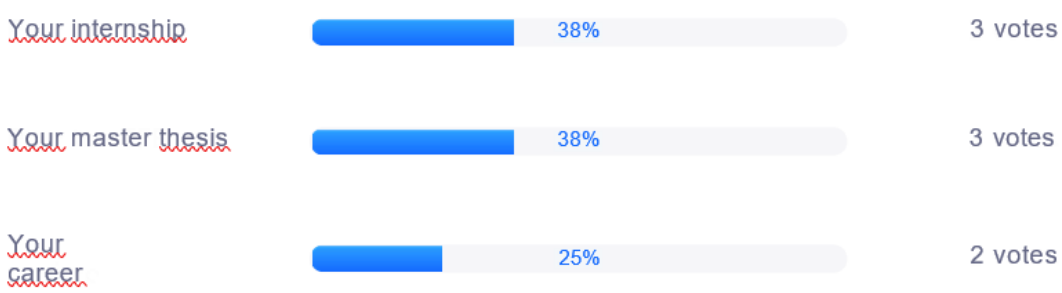
Question 18

According to you, what would be the best way to create teams?

Students chosing themselves	89%	8 votes
Draw	11%	1 vote
By level (the "best" together and the "weaker" together... it is the case in some universities	0%	0 votes
Teamleaders create their their team	0%	0 votes

Question 19

Did the mining engineering problems inspire you for … ?



Your internship – Comments (2)
No inspiration at all
I am looking for an internship in conception of workings and geotechnics so yes. I could see the aspects related to the development.
Your master thesis - Comments (1)
Yes
Your future career – Comments (5)
It gives me skills in many fields (numerical modelling, stability,…). I really like stability analyses so I get inspired in this direction.
No