



**BSTU meeting,
Minsk 10.03.2016**



Erasmus+

Analysis of the survey of master graduates employers

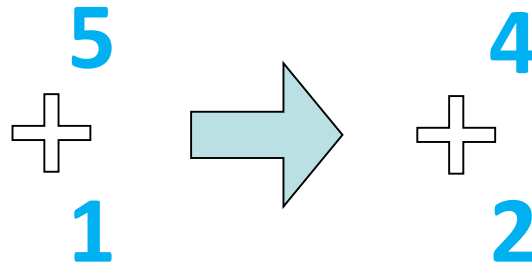
(within the framework of the project "Physics" Erasmus + EU)

PhD student, assistant Alexander S. Fedotov

fedotov.alexandro@gmail.com

What is the survey about?

Inspiration:



Expected results:

- Pooling ideas **how to form** the 2-year practice-oriented master-level education;
- Figuring out **what potential employers think** about qualification requirements for graduates of practice-oriented masterships;
- Identifying **training requirements** to graduates of masterships for the "4 + 2" system;
- Defining of the need and requirements for the organization of **practical training** of master students.

Who was interviewed?

List of participants:

- GrSU, GSU and BSTU;
- BSU departments of Semiconductor physics, Laser physics, Energy physics;
- Research Institute for Nuclear Problems of BSU;
- Belarusian Physical Society;
- Republic Association of Nanoindustry.

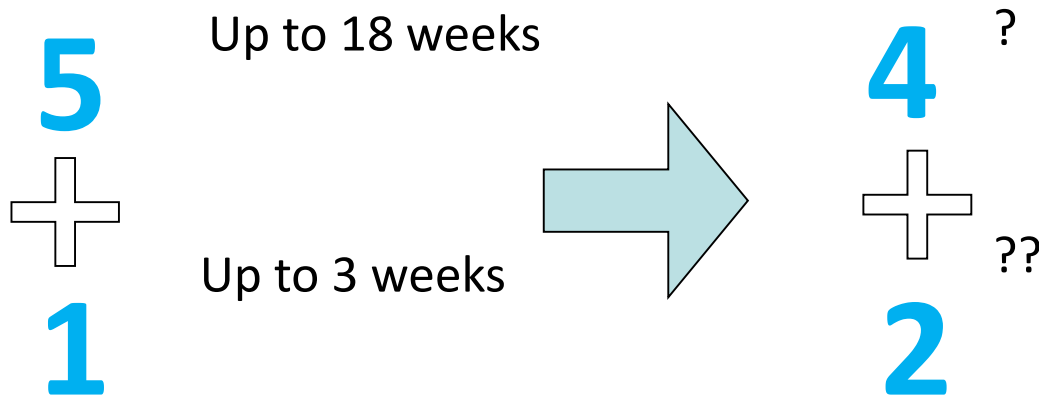
Full analysis was sent out

Questions about practice

Place:

- Chosen individually; depends on future job and theme of PhD theses;

Duration:

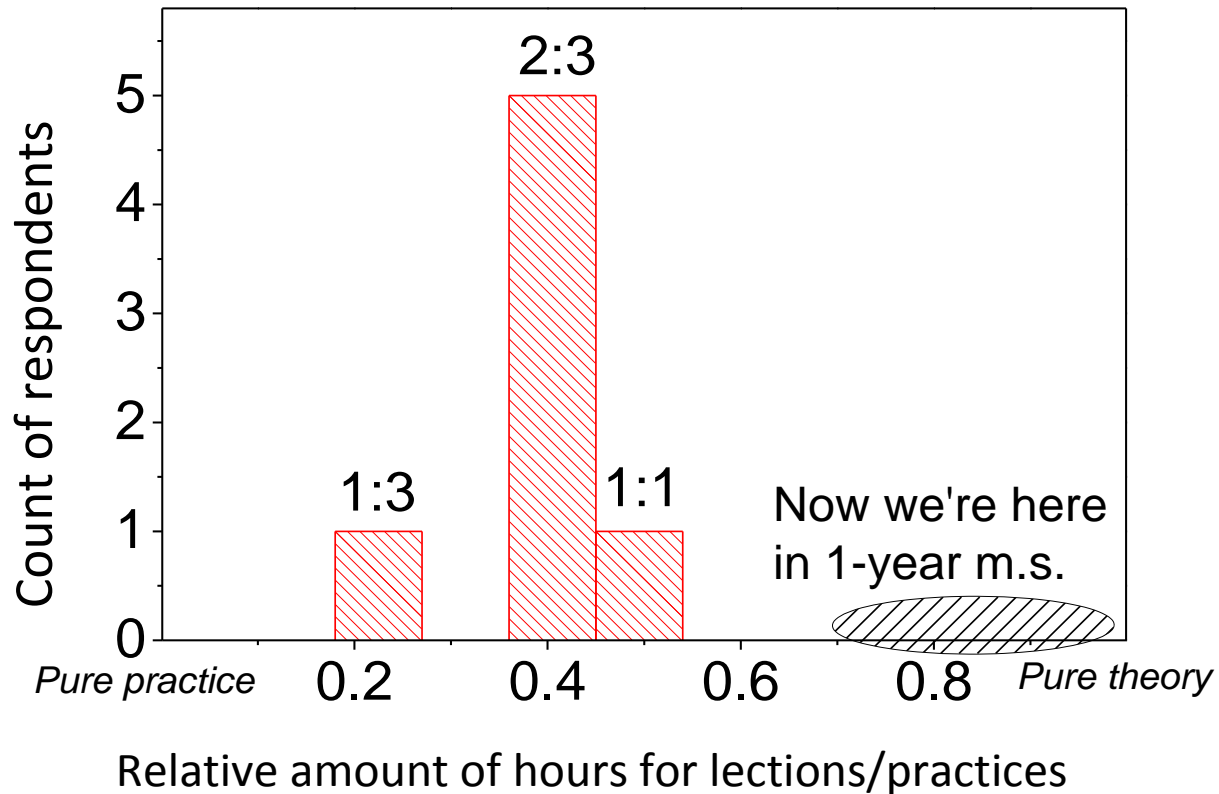


- Do we need to save this amount of practice? (**18 + 3 = ? + ??**)

The curriculum discussion

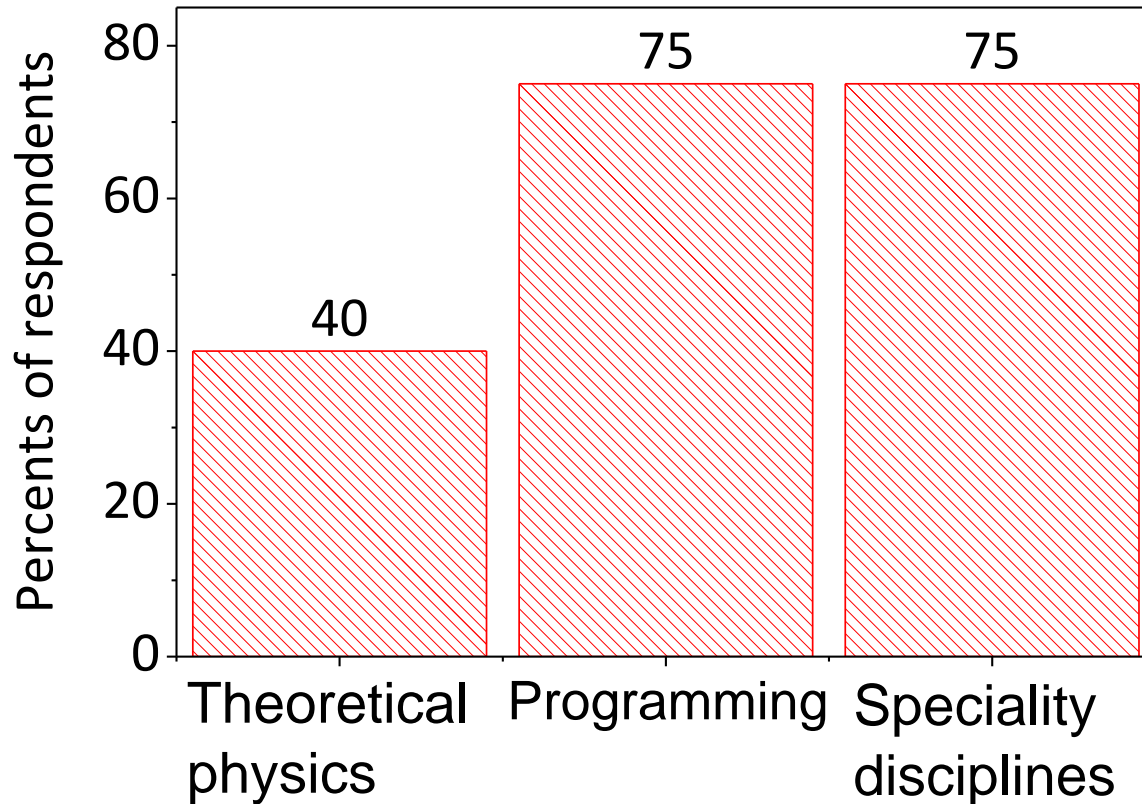
Ratio between time for lectures/labs'n'practices:

What should be the ratio of theoretical/practical training of master-students in the university, research institute or company?



The curriculum discussion

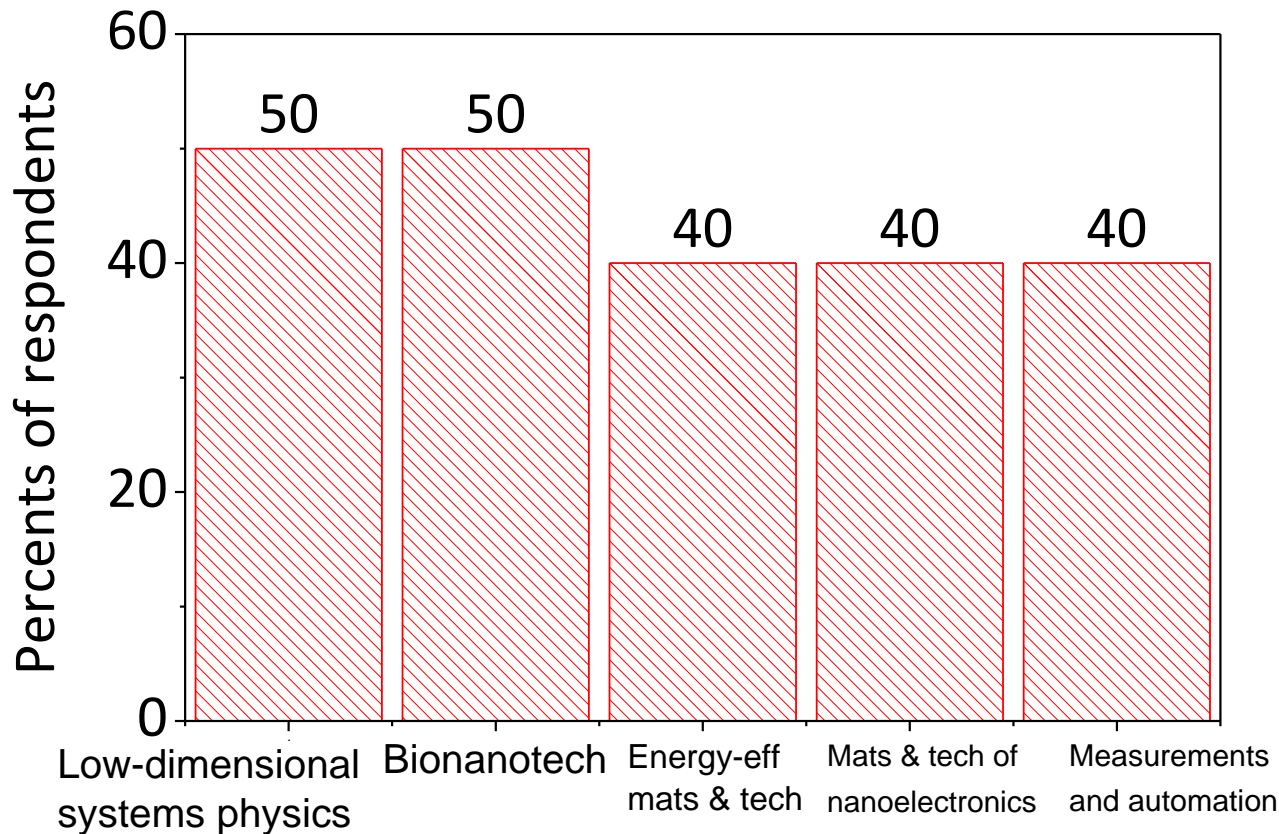
Most mentioned common topics of needed subjects



Majority of respondents noted the importance of the mastering the principles of modern high-tech equipment work and exploitation

The curriculum discussion

Most mentioned specific subjects



Oh!.. Where is 70% for programming?

- Automation and microprocessors?
- Computer-related math and tools for scientific computation?

Training and work in company

How much time does it take to make student able to work “self-sufficient” in company?

- For 16-18 weeks (the period of practice at the first stage of higher education) at the place of future work

What do you think can be improved in the educational process to reduce this time?

- It is recommended to enhance the fundamental training of master-students in physical and mathematical disciplines and improve their general skills, reducing the time dedicated to humanitarian disciplines

To which percent of master-level graduates company can offer to stay on a permanent job after practice?

- Respondents indicated that about 50-80 % of master-level undergraduates, on average, can stay after practice on a permanent job

Conclusions

It is reasonable to

- **Think how to keep balance of practices in “4+2” and “5+1” and prepare the labor market**
 - ❑ At least inform the employers about additional weeks needed to make worker self-sufficient;
- **Consider the recommendations for MS. curricula:**
 - ❑ Increase the fraction of special disciplines and programming (clarified?);
 - ❑ Introduce courses dedicated to nano- and biotechnology;
 - ❑ Proportion of theoretical and practical training for master-level students is recommended from 1/3 to 2/3.



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Thank you for your attention!

PhD student, assistant A.S. Fedotov
fedotov.alexandro@gmail.com