Biomedical Engineering - Project Course

• TBMT14

  Project work (U,G)  7,5 hp
  Written assignment (U,G)  1,5 hp
  Entrepreneurship assignment (U, G)  3 hp

• https://www.imt.liu.se/edu/courses/TBMT14/
Biomedical Engineering - Project Course

• Contact persons:
  • Marcus Larsson (Examiner, Customer LSI, supervisor PPG1)
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  • Karoline Holgersson (Educational administrator)
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    • phone: 013-286738
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- Schedule at TimeEdit
- Meeting room booked every Monday 13:15-15:00:
  - LSI - IMT3 (floor 13)
  - PPG1 - IMT6 (floor 12)
  - PPG2 – IMT7 (floor 12)
- Electronics and mechanics work shop when needed:
  - Talk to Expert Bengt Ragnemalm
- Final presentation Dec 14 at 13:15-17:00 in IMT1
- General course information can be found in the document Information TBMT14
**Biomedical Engineering - Project Course**

- Course evaluation

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- Condensed course goal:

  The goal is that each project group, using the LIPS model, should be able to carry out good engineering and project work to meet customer requirements as outlined by the project description. The total amount of work should, however, not exceed the resources given available by the customer.
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- The LIPS model - CDIO

[Diagram showing a process with stages labeled Before, During, and After, along with various milestones and activities like assignment, requirements, tollgate, design, code diagrams, etc.]

http://www.lips.isy.liu.se/en/
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- The LIPS model - CDIO

Tollgate - Customer meetings
Booked three days in advance

http://www.lips.isy.liu.se/en/
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- The LIPS model - CDIO

Customer requirements? Book meeting today, if possible!!

http://www.lips.isy.liu.se/en/
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- The LIPS model - CDIO

Schedule TG meetings with customer

http://www.lips.isy.liu.se/en/
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- The LIPS model - CDIO

Final presentation
Dec 14 at 13:15

http://www.lips.isy.liu.se/en/
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- The LIPS model - CDIO

Documents according to the LIPS model

http://www.lips.isy.liu.se/en/
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• Documentation:
  • Specification of requirements (TG2)
  • Project plan including an system overview and activity list (Sup.)
  • Time plan (Sup.)
  • Specification of design (TG3)
  • General test plan (TG4)
  • User manual (TG5)
  • Protocol for the acceptance test (TG5)
  • Final report with a reflection document (TG6)
  • Status reports (Sup.)
  • Reports over used time and resources (Sup.)
  • Protocols from group meetings
  • Theoretical assignment (individually written; max 3 pages).
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• Project plan and Time plan:
  • Internal document
  • Identify **activities** of manageable size
  • Time plan - Don’t forget to take the examination period into account!
  • Reviewed by supervisor
  • Submit to supervisor **21 Sep**
  • Revised version should be submitted **5 Oct**

• **Weekly** reports to your supervisor:
  • Status reports (Sunday; Finished, ongoing and planned activities)
  • Reports over used time and resources (Sunday)

• Protocols from **weekly** group meetings included as appendix in final report, together with all other documents (plans and reports).
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• Theoretical assignment:
  • 40 hours per person
  • Schedule meetings / lectures with supervisor.
  • Individually written – Max 3 pages.
  • Submitted to your supervisor no later than one week before the final presentation.
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• Resources:
  • 200 hours per person
  • Expert time – 1 hour per week
  • Supervisor meetings
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• Group functions/responsibilities beside **project leader:**
  • Documentation
  • Design
  • Implementation
  • Testing
  • Hardware
  • Software
  • Customer contact
  • Quality
  • …

• Team-building - Kick-off ??
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• Final words:
  • Quality of documents is important!
  • LIPS example/templates documents at:
    www.lips.isy.liu.se/en/
  • Start right away:
    • Study the LIPS model
    • Group contract
    • Kick-off
    • Responsibilities in your group (Project leader, …)
    • Book meetings with customer
    • Requirement specification
    • Project plan and time plan
    • Book theoretical seminars with supervisor.