



ITE Seminar Guideline

Objectives: This ITE Seminar-Guideline is intended to clearly specify content, objectives, procedures, evaluation and other issues regarding the seminar series at the ITE for the curricula BSc & MSc Petroleum Engineering. Target groups are the participating students, the ITE student supervisors, the seminar coordinator and the assigned teacher / professor.

Content:

1. Seminar objectives.....	1
2. General conditions and requirements.....	1
3. Seminar schedule.....	2
4. Seminar report.....	2
5. Seminar presentation, discussion, moderation	3
6. Seminar poster	3
7. Seminar evaluation	3
8. Criteria for failing the seminar	4
9. Seminar coordination	4
10. Documentation and close out	5

1. Seminar objectives

Students are supposed to learn how to search, analyse, accumulate and communicate scientific ideas and information and / or research findings in a short, precise and scientific manner through report writing, poster (MSc), presentation and discussion session.

2. General conditions and requirements

Each student is supposed to select a topic (out of two offered by ITE), work out this topic and provide the result of the work in a written 20 pages report after 6 weeks. 1-2 weeks later the student is supposed to present the results in a 20 minutes presentation and defend the results in a 10 minutes discussion and moderate the presentation of a fellow student. In the Master program in addition the student has to present the results on a poster.

	report	moderation	presentation	poster
BSc	X	X	X	
MSc	X	X	X	X

It is mandatory for all students to be present at each session. The **absence of a student in more than two sessions** (including coming late or leaving early) will be handled as **failing** the seminar.

The topic for the student will deal with the following content:

- for BSc general topic from the area of petroleum engineering. Therefore as a precondition it is required that the student has successfully completed at least 80% of the basic engineering studies of the semesters 1 to 4 (modules 1 to 10) and has already successfully participated in some of the petroleum engineering lessons (minimum of 20 of 58 ECTS gained in the modules 16 - 20). Seminar candidates will only be qualified to contribute for topics in special disciplines with successfully passed exams.
- for MSc specialised petroleum engineering topic

The topics will be defined by ITE staff and will be offered to the student with a clear title, a 5-10 line explanation / description and at least 2 literature sources.

An ITE supervisor will be assigned for each topic to support the student in his work. The role of the supervisor will be to:

- introduce and explain the topic to the student,
- be available for discussions about the topic,
- offer guidance on structure and content of report,
- recommend improvements on draft report,
- offer guidance on preparation and content of a poster,
- offer guidance on structure and content of the presentation,
- offer hints on moderation,
- participate in the presentation session

Students may have a number of appointment sessions with their respective supervisors. Prior appointment arrangements are recommended.

The language of the report, the poster and the presentation and discussion will be

- English for the MSc Petroleum Engineering students.
- BSc Petroleum Engineering students or participating students from other disciplines are allowed to use either English or German language.

3. Seminar schedule

The seminar should start at the beginning of the lecturing period of the semester:

1 st date	general introduction, preparation of report
2 nd date	introduction to literature search and pass out of topics for presentations,
3 rd date	introduction to viewgraphs, presentation and poster,
4 th date	example presentation(s) (industry or staff member).

The registration to the seminar has to be performed in the seminar course in Stud.IP. The deadline for registration is the first introductory session of the seminar. Later registrations can exceptionally be accepted in hardship cases only. Late registrations cannot be accepted if the first two introductory sessions and the passing out the topics have been missed.

7 - 8 weeks after passing out the topics: student's presentations (2-3 days, about 12 presentations per day).

Following the first introduction session a detailed time table will be posted on the ITE board and/or the seminar course in Stud.IP and updated regularly. This time table will show all relevant details for the seminar session such as

- Session, topic, report due date, presenter, moderator, ITE supervisor.

4. Seminar report

The student is requested to write a report about his topic describing the topic issue, the way the work was executed, the main findings and results, the conclusions. The report shall have about 20 pages. Format information about the report are summarised in attachment 1.

The **report has to cover the topic given** to the student. Reports missing the point will lead to failing the seminar.

It is **not allowed to copy from a reference**. The student can take information from references, but has to explain things with own words. Note that citation of the reference is required, even when paraphrasing the information, and if a passage is taken literally from a reference, then it has to be put in quotations. Having more than one page taken literally from a reference without quotations leads to failing the seminar, even when the reference to the source is provided.

The **report is due after 6 weeks of work** on the topic. It has to be uploaded to Stud.IP latest at the due date. 2 paper copies (not bound, all reports will be bound together later) and a pdf-file of the report is required. **No changes of the report will be accepted after the due date.** The reports have to be uploaded in time by the students. The seminar coordinator will inform the student about the procedure.

It is recommended that the student will contact his supervisor after 2 weeks of work on the topic and discuss content and outline of the report. Further appointments may be agreed between student and supervisor.

5. Seminar presentation, discussion, moderation

Presentation

Each student is obliged to present his topic in a presentation session to the fellow students, the members of the institute and other members of the university. The presentation will be earliest 1 week after the report due date. Conditions for the presentation are:

- Oral presentation in **20 minutes** (tolerance ± 3 minutes). If students exceed the allocated time for the presentation excessively, the presentation may be stopped.
- Presentations may be supported by power point view graphs (assume 2-3 minutes per slide, recommended maximum is 20 slides)

Discussion

Each student is obliged to defend his work in a discussion session immediately after the presentation. Conditions for the discussion session are as follows:

- All students are supposed to actively participate with questions
- Max. time 10 min (controlled by the moderator)
- Questions should be focussed around the topic presented
- Supervisors have to correct in case of errors or nonsense in the presentation

Moderation

Each presentation/discussion session will be managed by a moderator (fellow student). Main elements of the moderation are as follows:

- Introduction of speaker (name, background/study information)
- Introduction of topic
- Focus on timing and control timing
- Encouraging / leading of / controlling discussion (at least one (stimulating) question should be asked by the moderator)

6. Seminar poster

A poster is to be prepared illustrating the topic, the main elements and aspects, the main findings and conclusions.

The poster shall be uploaded to the ITE server by the student latest 2 working days prior to the presentation at 10 am.

The poster shall be prepared in DIN A3 format, printed on paper. It will be posted on the wall of the room, in which the seminar presentation session takes place together with all the other posters of this presentation session at least one day prior to the presentation. After the presentation the posters will be collected by the seminar coordinator. The poster with the highest grade of one seminar day shall be printed by ITE on DIN A0 and posted at least for 1 week in the ITE entrance hall.

7. Seminar evaluation

The ECTS points for participating in the seminar series are as follows

BSc -> 5 ECTS

MSc -> 4 ECTS

The evaluation will include all elements of the seminar series in the following allocation. The grading scheme will be 1 – 4 or failed.

	report	moderation	presentation	poster
BSc	40%		60%	
MSc	40%	10%	40%	10%

Basic element of the evaluation will be the presence of the students in the seminar sessions. It is **mandatory for the students to take part in each session**. Therefore missing more than 2 sessions (including coming late or leaving early) of the seminar series will be evaluated as failing the seminar completely. The presence will be registered by the seminar coordinator in each session by attendance lists.

The report will be evaluated by the supervisor of the topic prior to the presentation. A written conclusion will be handed over by the supervisor to the seminar coordinator prior to the presentation session. It is recommended that the supervisor also ask one of the other ITE supervisors for an independent second opinion. The result will also be documented on the report evaluation sheet.

The evaluation of the presentation and the discussion, poster and moderation will be executed by the ITE members participating in the presentation session. Evaluation sheets (will support the forming of the opinions. All members can contribute their opinion and will have the same weight in the final grading.

In the presentation sessions it is mandatory that the assigned teacher or a deputy is present.

In cases of delayed handing in of poster or report the following penalties will apply:

- For poster one step of grade point (0,3 or 0,4) per day to the poster grading,
- For report one step of grade point (0,3 or 0,4) per day for the total seminar grading.

8. Criteria for failing the seminar

As already mentioned in the text above the following criteria will lead to failing the seminar:

- missing more than 2 sessions (including coming late or leaving early) of the seminar series,
- a report, which does not cover the topic given to the student (missing the point),
- failing to present and defend the seminar work.
- It is **not allowed to copy from a reference**. The student can take information from references, but has to explain things with own words. Note that citation of the reference is required, even when paraphrasing the information, and if a passage is taken literally from a reference, then it has to be put in quotations. Having more than one page taken literally from a reference without quotations leads to failing the seminar, even when the reference to the source is provided.

9. Seminar coordination

For each seminar a coordinator will be assigned by the assigned seminar teacher latest 4 weeks before the start of the lecture period.

Roles and responsibilities of the seminar coordinator are as follows:

- Planning and running the seminar sessions,
- To hand over these regulations to the participating students at the beginning of the seminar (paper or link),
- Scheduling the seminar sessions,
- Requesting and collecting seminar topics,
- Acting as focal point for the seminar for all involved,
- Requesting, contacting and arranging for industry participation,
- Posting and updating seminar schedules,
- Collecting seminar reports, posters, evaluation sheets,
- Preparing final grading information,

- Presenting the introduction information,
- Arranging for library use information,
- Keeping track on all seminar activities,
- Managing attendance lists.

10. Documentation and close out

It is recommended after the presentation session that the assigned supervisor for the topic holds a feedback session with the student to discuss the outcome of report, presentation, moderation and if applicable poster. Objectives of this session should be to explain and recommend areas of improvement.

After completing all presentations the assigned teacher / or deputy should hold a final session to discuss with the students the principle findings of the seminar, elucidate on lessons learnt and discuss any feed back.

Upon completion of the seminar the seminar coordinator will deliver the complete set of reports to the ITE library for filing. Report-pdf files will be saved by the seminar coordinator in the ITE server.

UB/CP

Attachment

1. Report format and report outline information
2. Guidelines on presentation of research work
3. Guidelines on poster presentation of research work

Attachment 1.

ITE Seminar series Report format and report outline information

- Final report should be about 20 pages long, single-spaced, Arial 11 pt font (max. 10 000 words),
- Report should contain a ½ page abstract,
- Tables and figures should be of good quality and provided with references,
- Tables, figures and equations have to be numbered,
- A list of symbols as well as abbreviations has to be included,
- Footnotes are allowed (and would contain comments/ explanations that are not necessary to be included in the main text),
- SI units are preferable; otherwise, a table with conversion factors to SI units should be included. The German Scientific Institution (DIN) is obliged by international agreement to use SI units only.

Structure of report

- Summary/ abstract,
- List of contents,
- Introduction (outline of objectives & methods of study),
- Main part (discussion of research topic and/ or research findings; statement on possible usefulness and application of research findings in the energy industry),
- Conclusions,
- Recommendations (if any),
- References.

References

References have the purpose of:

- acknowledging authorship and intellectual property rights of used sources,
- giving a reader access to sources of information used in the report,
- Only reliable information may be referenced,
- care should be taken during extraction of information from internet sources,
- To be quoted / referenced are articles used as sources of information (and not individual quotes as may appear in the text).

Attachment 2.

ITE Seminar Series Guidelines on Presentation of Research Work

Presentation

- Timing 20 min \pm 3 min
- Expect 2-3 min per viewgraph (max 20 viewgraphs)
- Speak clear, easy, accentuated, no complex sentences
- If possible speak free, use notes only for guidance
- View the audience
- Speak not too fast
- Audience needs to understand
- Use material (viewgraphs)
- Use board for additional explanations

Presentation structure

- Introduction
- Main part
- Conclusion

Presentation preparation

- Check viewgraphs (i.e. in seminar room)
- Check timing
- Make dry run (i.e. with fellow students) – highly recommended

Viewgraphs

- Use corporate design of TUC
- Check timing per viewgraph
- Easy to read
- Min font 18 pt (last lane in audience must be able to read)
- If necessary replace text in pictures
- Highlight important issues
- No fancy animation
- No fancy colours
- Pictures only for support
- Pictures should have good quality
- Explain everything on the viewgraph
- Explain graphs (scales and content)
- No full long sentences on viewgraphs
- Equations need much time for explanation (use equation editor)
- References for graphs and pictures (small)

Attachment 3.

ITE Seminar Series Guidelines on Poster Presentation of Research Work

A poster is a static, visual medium (in form of paper or board) used to communicate intended information / ideas and messages. In science/ engineering posters are used to present technical information and / or findings of a research work. At conferences, conventions or workshops, a poster presenter has to stand by the poster to answer questions and provide further details.

Allowed poster space

At conferences, conventions and / or workshops, a limited space is usually provided for each poster. In this case, the allowed space will determine the size and content of a poster. Usually, one has to find out in advance how much space is allowed.

Standard format

A standard poster would include the sections below.

A title section, showing:

- the title of the project
- the people involved in the work and their affiliation

A summary of the project, stating:

- what has been done
- how it was done
- key findings/ main results

An introduction, giving clear statements about:

- problems to solve
- information/ characteristics to discover and/ or proofs to establish
- an ultimate declaration of project aims and objectives

Methodology section:

- to explain the basis of used technique or adopted procedure in the study
- to state and justify any assumptions (so that results could be viewed in the proper context)

Results section:

- showing illustrative examples of the main results of the work

Conclusion section:

- main findings of an investigation/ a research study are listed

Further work section:

- to contain recommendations and thoughts about how the work could be progressed
- other tests that could be applied, measures to undertake to improve on the results, etc.

Planning a poster

- Prior planning of a poster involves some stages.

1. Gathering information

The gathering of information for the poster will be determined by or based on:

- the objective of the investigation
- whether the work has been done before
- one's approach in the study
- reasons for chosen approach or route of investigation
- the principles governing used technique
- assumptions made and their justifications
- encountered problems
- obtained results
- whether targeted problems have been solved or not
- lessons learned from the study
- a sound analysis of results of study
- In gathering relevant information (from given research findings) for a poster therefore, one has to consider:
 - what has been done

- how it has been done
- why it has been done
- what has been obtained
- accomplished and unaccomplished objectives and contributions
- available information for presentation

2. Deciding on the content

The limited space available on a poster means one has to decide between what is important and what is not necessary for inclusion. Such a decision is usually influenced by the following factors:

- Aim/ objective of presenting a poster (e.g. reporting works done or a new discovery; comparison and recommendation of techniques)
- Type of audience, i.e. people to attend the presentation (whether they are technical people; and their level of knowledge in subject area).

The information obtained above will assist to define the type of content to include; and thereby set the tone of the presentation.

3. Designing a poster

A poster should be designed in such a way as to:

- give a good impression
- serve the purpose of conveying intended information

4. Guidelines of presenting information on a poster

Keep the material simple

- make full use of the space (but do not squeeze too much information on a page)
- be concise and use only relevant information
- present only those results that illustrate the main findings of the project
- however, do keep other results ready so that you may refer to them when asked

Use colours sparingly and with taste

- colours should be used only to emphasise and differentiate. Do not use colours just to impress!
- avoid using large swathes of bright colours (bright green, pink, orange or lilac)
- choose background and foreground colour combinations that have high contrast and complement each other (e.g. black or dark blue/ dark green on a white/light grey background is good)
- a light/ white background is preferable

Do not use more than 2 font types

- too many font types in a sentence or paragraph would cause distraction
- recommended fonts (that are easy on the eyes) are Times New Roman and Arial

Titles and headings

- should appear larger than other text, but not too large
- the text should be legible from a distance of 1.5 to 2 m
- Do not use all UPPER CASE type in posters, this could make the material difficult to read

Do not use a different font type to highlight important points

- This would disrupt the fluency and flow of your sentence
- use underlined text, bold face or italics or combinations to emphasise words and phrases
- if bold italicised print is used for emphasis, then underlining is not necessary

Equations

- should be kept to a minimum
- only necessary and important equations are to be presented
- should be large enough
- should be accompanied by nomenclature to explain the significance of each variable

Pictures

graphs

- type of graph should be appropriate to the information to be presented
- lines of line-graphs should be thick enough to be viewed from a distance
- do not use more than six line-graphs on a single plot
- use contrasting coloured lines or different line styles to distinguish between different lines in multi-line graphs

- multi-line plots or plots with more than one variable should have a legend relating the plotted variable to the colour or style of the line

diagrams and drawings

- should be labelled
- drawings and labels should be large/ clear enough to be read from a distance
- Use “arrows” to avoid cramping/ squeezing labels into a diagram/ drawing

Check your spelling

- spelling mistakes should be looked for and corrected
- spelling mistakes give the impression of lack of effort and carelessness; and should be avoided

Maintain a consistent style

- inconsistent styles give the impression of disharmony and can interrupt the fluency and flow of your messages
- headings on different pages/ sections of the poster should appear in the same position
- graphs should be of the same size and scale especially if they are to be compared
- if bold lettering is used for emphasis on one page/ section, then do not use italics on others
- numbering of graphs, drawings and tables should either be positioned at the top or at the bottom side

5. Arrangement of poster components

Arrangement of poster sections should be in accordance with the storyline of the presentation.

6. Review

Draft versions of poster sections should be checked for mistakes, legibility and inconsistency in style. Different layout arrangements could be tried out. Seek the opinion of colleagues, friends or supervisor on the poster.

7. Printing a poster

- Posters can be printed at ITE, TU Clausthal
- Poster document should be converted to pdf format before printing
- Printed poster should have a “TUC Corporate Design” logo
- For assistance in printing at ITE contact your ITE supervisor