

Introduction

The purpose of this document is to give guidance on the formation and operation of Study Groups set up to help students prepare themselves for the IRSE Professional Examination. More information about the examination is available on the IRSE website (www.irse.org), including information for students, syllabus, study guides, suggested reading material, past papers, sample answers and details of existing Study Groups and the independent IRSE Exam Forum website.

Why Study Groups are useful

The IRSE Examination is challenging, and it requires students to possess considerable depth and breadth of knowledge, which for most students is beyond what they will gain just doing their day job. Except for the more mature candidate who has a breadth of career experience, usually there is one module which aligns best to existing knowledge, but for other modules students can expect to need to acquire knowledge from learning prior to being able to start to attempt exam questions. Students therefore need as much help as possible to perform well, and although it is possible to prepare for the exam by studying alone, experience shows that students are aided greatly by having the opportunity to spend time learning together.

Whereas every person learns differently, most can assimilate information better from active participation in demonstrations and discussions to supplement book learning, than in reading alone. In addition, working within a group provides motivation to devote study when there might otherwise be other priorities and also enables students to share knowledge and understanding, hear from experts on specific topics, discuss how best to answer past exam questions, and focus on issues with which they are having difficulty. A further benefit is that it enables each participant to judge their level against others in the group and activities such as undertaking a mock exam in realistic conditions becomes an option.

The formation of a Study Group is regarded as one of the best ways of achieving this “learning together”, and the IRSE therefore encourages students, other IRSE members and employers, to support the formation of groups to enable students to perform well in the examination.

That said, students should remember that attending a Study Group is an important supplement to studying on their own, but it is not a substitute for personal preparation. They will not pass the exam simply by participating in Study Group meetings, far less by passive attendance. The most effective Study Groups involve the participants in discussing a specific topic or past exam question for which they have done their own preparation ahead of each meeting of the group.

Forming a Study Group

Considerations

If you are considering forming a Study Group, you should begin preparations for it as soon as you know who is considering taking the examination in your geographical area and/or your company in the next few years and therefore may be interested in being a member of the group. It is sensible to canvas opinion early in the examination timeline, preferably even before the previous year's examination results are known. Whereas a candidate who has attempted a module may understandably want to know their previous results prior to committing for the following year, to be manageable a group needs to take into account the majority.

Timescales

An introductory session could be held in November to introduce the leaders and participants and to decide the composition and aims of the group. This will enable any people who are not already members of the IRSE to submit their applications in good time and all to consider their study plans. A serious start on actual study can then be made in January and incorporate the IRSE Exam Review meeting¹ findings early on.

This timescale permits some 6 months of basic topic learning to be achieved, prior to the need to concentrate on revision and the finer points of examination technique in the period immediately prior to the exam². All this assumes, of course, that students attending the Study Group are taking the exam in the same year. However, this need not be the case and students may wish to participate in a group the year before the one in which they are taking the exam or may be studying to gain knowledge without sitting the exam; for example where experienced engineers have joined the profession from another industry and are keen to expand their domain knowledge to be more effective in their new career but may already be Chartered due to their previous experience.

Study Group Participants

A minimum of 4 participants is recommended to form a study group, although if that is not achievable, even as little as two people working together is better than nothing. The ideal group size is probably 8 to 16 people since the greater the size of the group the more effort which is needed for co-ordinating everybody rather than concentrating on the learning activities.

Some study groups have participants who dial in because they are unable to attend in person; whereas this is certainly better than not being involved in a group at all, it does not enable all the advantages of working in a group to be achieved and it is certainly advantageous if the remote members can participate in person at least on an occasional basis

¹ The IRSE Exam Review is held annually in UK for examiners to feedback comments on each module. These are videoed and the most current is available once logged in at [IRSE Login - Recent Webcasts](#) and previous years' at [IRSE - Knowledge - Technical Papers](#)

² The exam is held on the Friday of the first week in October in Australia and the next day (Saturday) for rest of the world

It is important to choose a leader and deputy for 'Study Group' administration and management purposes. These two people could be students, or they could be other IRSE members who have more experience of the examination subject matter and are willing to lead the group; for a company-based group, they could even be administrative staff.

For study groups with "remote" participants, it is considered good practice for as many as possible remote participants to be gathered together at one or more remote sites for the study group sessions, with a facilitator at each. Where there are a large number of individual remote members, then it becomes very difficult for these to be other than eavesdroppers to the session. Whereas listening in "live" or listening subsequently to a recording (if facilities are available and all participants are comfortable with the sessions being recorded; bear in mind that recording might prevent participants from asking those useful "silly questions" that clarify material for the entire class!) is useful for those members who would otherwise have to miss a particular session, it is certainly a non-preferred option for long term participation. However one way in which it can be made to work is if any remote participant is particularly assiduous in preparing for sessions and submits their thoughts prior which can then be discussed by the main group.

Meeting Times

A minimum of one two-hour session per module every two weeks is recommended. Some study groups meet at lunch times, many more meet after work and some at weekends.

If participants are able and willing to commit more time, then covering multiple modules within the same year becomes practicable. The members of a group might wish to meet more frequently in the weeks immediately preceding the examination.

Location

You will need to identify a location to meet which is suitable for all the members, and if necessary have dial-in / video conferencing facilities available for those who are unable to attend in person. You might be able to find a railway industry company willing to provide the venue (meeting room) free of charge. Some companies, however, may restrict those attending in person to their own staff. The remote participants are recommended to be in a meeting room or quiet area, away from the distractions of their own desk.

You will need, as a minimum, a whiteboard, projector, flip chart etc. If you are expecting students and/or session leaders to dial in, suitable telephone / video conferencing facilities should be available, with sufficient microphones and speakers for the "main room" and speakers / headphones with mute buttons for those dialling in. Remote students should be encouraged to book meeting rooms with these facilities, because it only takes the background noises from one remote site to be a distraction for everybody else.

When considering questions and answers in Module 2 of the exam it is helpful to have a longer desk for viewing and working on scheme plans and other drawings.

A technical library associated with your Study Group which the members can easily access will be very useful. It may contain relevant textbooks, papers and other study materials³.

³ Note that many study materials and information is available on the IRSE website via [IRSE - Knowledge](#) and once logged in at [IRSE - Exam](#)

Planning your Study Group's activities

The following factors should be considered when planning the study group's activities:

- a) How many students/participants are committed to attending the Study Group?
- b) What level of knowledge and experience do the participants have? Do any of them have experience of taking a module already?
- c) Which modules are to be covered this year in the Study Group sessions? Do not be too ambitious by trying to cover too many modules; typically 1 or at the most 2 should be attempted by any one group in a year unless it can actually be split into separate groupings for different candidates. In deciding which modules to cover, consider those modules that the participants have already studied, and their existing knowledge and experience. You will need to balance their individual ambitions regarding which modules to cover against the need to give maximum benefit to the group.
- d) If the students are taking different modules and/or have significantly different capabilities and experience, can they be split into sub-groups for the purposes of studying some topics areas (and is there sufficient leadership for this to be done)?
- e) Can you identify a pool of expert professionals in your geographical area, who can be approached to support the study group by giving presentations and advice at the meetings?

Duties of the Study Group Leader/Deputy

- a) Find suitably equipped venue(s). A group may decide use a single venue, or to circulate its meetings between various sites. The latter might be done to suit the work locations of its members, or to take advantage of specific training / educational facilities available at specific locations.
- b) Prepare a list of contact details/email address of all participants and get their permission to share with the other participants.
- c) Agree with the venue host and the students the dates/times at which the group will meet.
- d) Consider setting rules and get a commitment from each student; the larger the group the more important this is, since it is very easy to be too accommodating to the individual and the group as a whole will suffer.
- e) Find out from your students who their senior managers are and make sure that they know of the study group's existence. Actively seek their support, for instance by providing experts to impart their knowledge, allowing adequate time for students to meet, provision of meeting facilities, or help with forming the technical library.
- f) Make sure your 'Study Group' is listed on the IRSE website.
- g) Agree in advance with the participants the topics to be discussed, to give them adequate time for preparation.
- h) Share responsibilities between attendees to prepare/research the topics areas and share their knowledge with other members.
- i) Contact suitable professional experts, enlist their help, and agree with them the topics areas they are able to cover in study group presentations and discussions with the candidates. When inviting experts to assist, remember

that these are self-help groups, not lecture sessions, and the emphasis should be on discussion and learning together.

- j) Make sure all attendees get the opportunity to participate in the discussions (for example by asking open questions and specifically asking participants at remote locations if they have any thoughts), with the assistance of nominated facilitators, if necessary, in remote groups. There is a risk that remote participants will listen passively rather than taking part if they are not specifically involved at regular intervals. As soon as one remote participant starts to interact, it reminds all other remote participants that they can also interact; it is worthwhile asking any remote facilitators (or simply a more outgoing remote study group participant!) to comment on the material being presented to keep the group behaving interactively. This is also a great assistance to the study group leader in checking that the material is being covered at the right pace and at the right depth for all participants.
- k) Organise site visits if appropriate and relevant to the modules.
- l) Get advice, teaching material and support from other Study Groups who are dealing with similar modules and be prepared to support them as well.
- m) Prepare and maintain “issues lists” of topics that candidates need more help on, and seek an expert’s advice if necessary.
- n) If the students in the Study Group are not members of the IRSE, check that they have applied for membership as candidates must be IRSE members in order to apply for and take the exam.
- o) An Examination Centre can be created in your area if there are significant numbers of candidates available to take the exam. Contact IRSE HQ for advice about this.

Basic agenda and content for a typical study group session

Each study group should decide how it wants to operate, and how to cover the material for the modules being addressed by the group. The basic agenda below is offered to give study groups an idea of how each session might be structured.

1. Review how students answered the past exam question set as homework after the last session (see 4 below). This should be done by the group members critiquing each other’s answers, and by expert input from people who are knowledgeable on the subject matter.
2. Nominated member or expert introduces/presents this week’s discussion topic. Make sure that all the group members participate in the discussion, focussed on increasing their understanding of the topic.
3. Deal with queries from students on specific issues that they need help with or are unclear about (preferably advised to the leader ahead of the meeting). These might relate to the discussion topic (in 2, above), or might be on other subject matter that is relevant to the exam module under consideration.
4. Plan for the next session, including agreeing a past exam question that students will attempt as homework before the next session and informing students about any other preparations they need to make, and any work or materials they will need to bring.

Key Contacts

IRSE Membership and Registration Manager Christine.white@irse.org

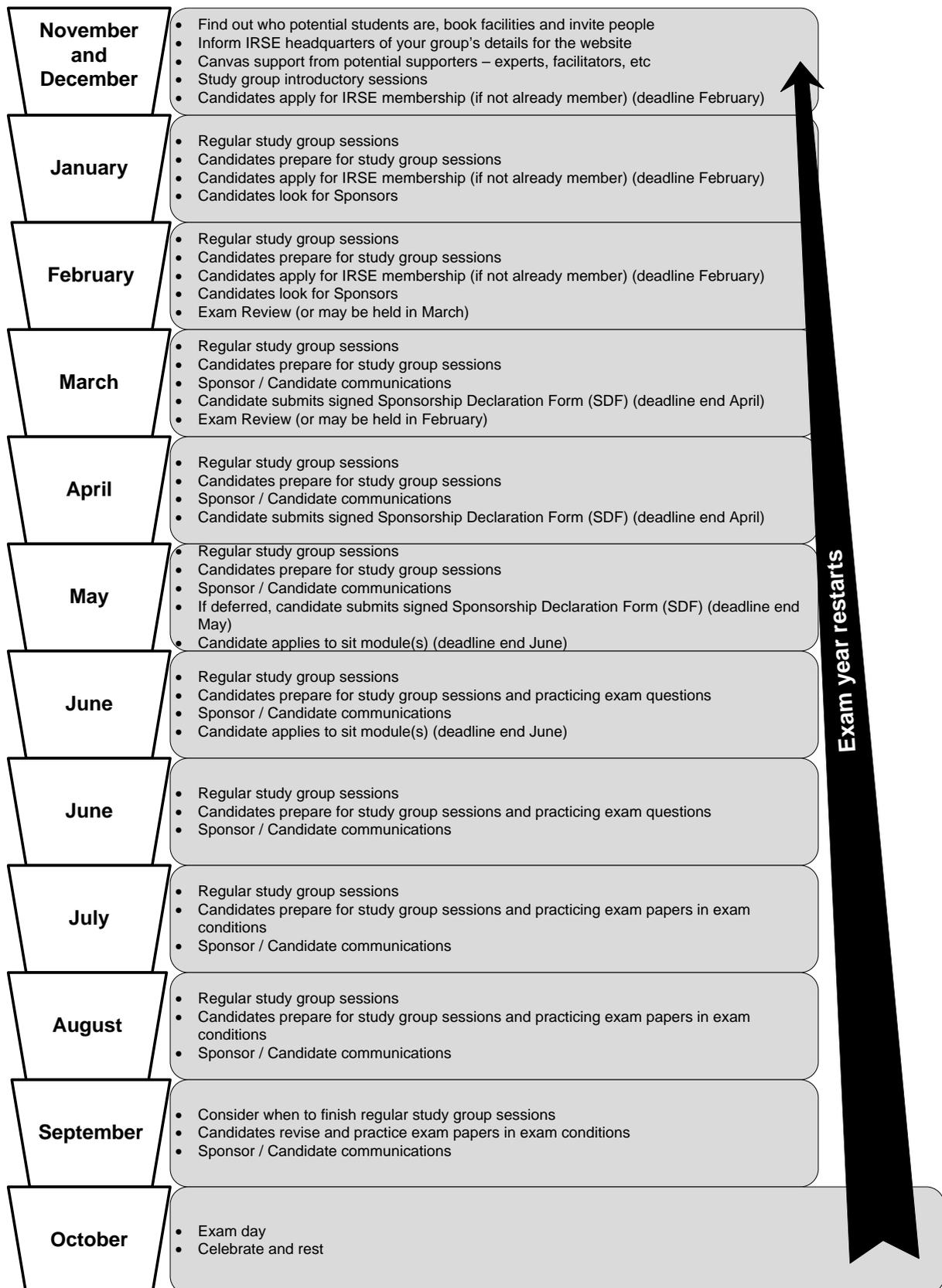
IRSE Professional Development Manager Judith.ward@irse.org

IRSE Education & Professional Development Committee – via pd@irse.org

Indicative Timeline For New Professional Examination Study Groups

June to October	<ul style="list-style-type: none"> • Start planning • Find out who potential students are • Canvas support from potential supporters – experts, facilitators, etc • Inform IRSE headquarters of your group's details for the website
November and December	<ul style="list-style-type: none"> • Book rooms and video conferencing facilities (if using), send invitations to all participants • Study group introductory sessions • Candidates apply for IRSE membership (if not already member) (deadline February)
January	<ul style="list-style-type: none"> • Regular study group sessions • Candidates prepare for study group sessions • Candidates apply for IRSE membership (if not already member) (deadline February) • Candidates look for Sponsors
February	<ul style="list-style-type: none"> • Regular study group sessions • Candidates prepare for study group sessions • Candidates apply for IRSE membership (if not already member) (deadline February) • Candidates look for Sponsors • Exam Review (or may be held in March)
March	<ul style="list-style-type: none"> • Regular study group sessions • Candidates prepare for study group sessions • Sponsor / Candidate communications • Candidate submits signed Sponsorship Declaration Form (SDF) (deadline end April) • Exam Review (or may be held in February)
April	<ul style="list-style-type: none"> • Regular study group sessions • Candidates prepare for study group sessions • Sponsor / Candidate communications • Candidate submits signed Sponsorship Declaration Form (SDF) (deadline end April)
May	<ul style="list-style-type: none"> • Regular study group sessions • Candidates prepare for study group sessions • Sponsor / Candidate communications • If deferred, candidate submits signed Sponsorship Declaration Form (SDF) (deadline end May) • Candidate applies to sit module(s) (deadline end June)
June	<ul style="list-style-type: none"> • Regular study group sessions • Candidates prepare for study group sessions and practicing exam questions • Sponsor / Candidate communications • Candidate applies to sit module(s) (deadline end June)
July	<ul style="list-style-type: none"> • Regular study group sessions • Candidates prepare for study group sessions and practicing exam questions • Sponsor / Candidate communications
August	<ul style="list-style-type: none"> • Regular study group sessions • Candidates prepare for study group sessions and practicing exam papers in exam conditions • Sponsor / Candidate communications
September	<ul style="list-style-type: none"> • Consider finishing regular study group sessions • Candidates revising and practicing exam papers in exam conditions • Sponsor / Candidate communications
October	<ul style="list-style-type: none"> • Exam day • Celebrate the end of your first "exam year" • Continue using the "indicative timeline for established professional examination groups"

Indicative Timeframe For Existing Professional Examination Study Groups



Considerations for setting up a remote study group

Locations

- "Main" location accessible for majority of participants
- Minimum number of "remote" location(s) as possible, encouraging remote students to gather together
- Timing to suit majority of people, taking different working hours, time zones, etc into consideration

Facilities

- Good internet / phone access
- Remote dialling in / video conferencing facilities
- Screen share, if possible
- In all locations - cameras, speakers (with mute button), microphones
- Consider whether recording facilities are required, taking all participants into consideration

People

- Study group leader and deputy responsible for administration of group
- Students responsible for their own learning, preparation and participation in group discussions
- Facilitators in rooms of more than 2 candidates - to encourage participation with main group and lead smaller group discussions when necessary
- Subject experts to lead discussions, ask questions and answer questions
- Sponsors of candidates (MIRSE or FIRSE)

Subject(s)

- Consider how many modules it is practical to study for, considering how many students you have
- Consider "streaming" students based on their current knowledge and experience - with different sessions for different levels, or sharing students with other study groups

END