Why become an INCOSE SEP?

Becoming an INCOSE SEP is an important milestone for anyone who regards Systems Engineering as their home discipline. As a systems engineer, SEP certification provides an industry recognised independent assessment of knowledge, education and real-world experience by a panel of independent experts. Key benefits include:

- Recognition as a professional system engineer
- A discriminator that can aid your career
- A demonstration of your commitment to continuing professional development
- Connecting you with innovative, influential and inspirational people
- An internationally recognised qualification awarded by INCOSE, the professional home of Systems Engineering

If you represent a business operating in the area of Systems Engineering or which employs systems engineers, the SEP programme can support your business.

- Provides evidence of your organisation’s Systems Engineering capability: Certified systems engineers can be a selling point and a discriminator in proposals
- Supports the recruitment of systems engineers
- A visible mechanism to acknowledge the achievements of your employees
- Encourages employee participation in CPD
- Promotes professional competence of your workforce

Need help?

This leaflet is intended only as a brief introduction to professional certification for systems engineers through INCOSE UK.

For further information, on INCOSE certification click here.

Download copies of this leaflet and other Systems Engineering resources online by clicking here.

For more information about the worldwide Systems Engineering professional community, go to: www.incose.org

For information on all aspects of professional development as a systems engineer through INCOSE UK, contact: profdev@incoseuk.org

Lead author: Ian Presland

What is Systems Engineering certification through INCOSE UK?

Certification as a Systems Engineering Professional (SEP) is a key step in your career development as a systems engineer.

Certification is the only mechanism recognised by the International Council on Systems Engineering (INCOSE), through which your Systems Engineering knowledge, experience and leadership credentials can be independently assessed.

Applying for SE certification through INCOSE UK

You must be a member of INCOSE UK before applying for INCOSE certification. For more information on becoming a member, please visit the INCOSE UK membership page.

Once you are a member, you can apply for certification through the INCOSE UK website. The first step would be for you to study the supporting guidelines for certification applications. It is also advisable to seek the advice of a certification mentor. Often your employer can provide a mentor. If this is not possible, INCOSE UK may be able to help. Mentors understand the requirements for each level of certification and will ensure that your application presents your experience in an appropriate manner.

Current fees for certification through the UK Chapter are published on the INCOSE UK website.
Who governs Systems Engineering certification?

The International Council on Systems Engineering (INCOSE) governs the SEP Certification Programme. Further details are available on the INCOSE website.

What levels are on offer?

INCOSE recognises three levels of SEP certification, depending on your knowledge, experience and leadership background:

- Associate Systems Engineering Professional (ASEP)
- Certified Systems Engineering Professional (CSEP)
- Expert Systems Engineering Professional (ESEP)

Which level is right for me?

ASEP: For those who have just started (or want to start) practicing Systems Engineering, have a keen interest in Systems Engineering or have recently graduated from university.

CSEP: For practicing systems engineers with typically five or more years of Systems Engineering professional work experience. Requires candidates to demonstrate breadth and depth of Systems Engineering experience: including at least one year or greater experience in at least three or more of 15 recognised areas of Systems Engineering, and at least five years of experience overall.

ESEP: For leaders with many years of Systems Engineering work experience. Requires candidates to demonstrate depth and breadth right across Systems Engineering: including at least 25/20 years of Systems Engineering experience, with at least two years or more experience in at least six of 15 recognised areas of Systems Engineering.

What do I have to demonstrate at each level?

<table>
<thead>
<tr>
<th>Level</th>
<th>Exam</th>
<th>Education</th>
<th>Experience</th>
<th>Leadership</th>
<th>References</th>
<th>Panel Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASEP</td>
<td>Yes (Note 1)</td>
<td>Technical degree (Note 2)</td>
<td>Minimum five years SE experience with breadth and depth (Note 3)</td>
<td>N/A</td>
<td>Three references (cumulative coverage of the years of experience)</td>
<td>N/A</td>
</tr>
<tr>
<td>CSEP</td>
<td>Yes (Note 1)</td>
<td>Technical degree (Note 2)</td>
<td>Minimum 25 years (20 if CSEP)SE experience with breadth and depth (Note 3)</td>
<td>N/A</td>
<td>Three references (cumulative coverage of at least the most recent 10 years of experience)</td>
<td>N/A</td>
</tr>
<tr>
<td>ESEP</td>
<td>N/A</td>
<td>Technical degree (Note 2)</td>
<td>Accomplished and recognised leader in Systems Engineering</td>
<td>N/A</td>
<td>N/A</td>
<td>Panel interview generally required</td>
</tr>
</tbody>
</table>

NOTES:

1. Exam is based upon INCOSE Systems Engineering Handbook.
2. Additional years of experience can be presented in lieu of a qualifying technical degree. For a non-technical degree, add five years. If you do not have a degree, add 10 years. INCOSE determines what qualifies as a technical degree.
3. Breadth and depth of SE Experience needs to be demonstrated in multiple areas, in accordance with prescribed limits.

Maintaining certification

Becoming a SEP confirms your commitment to remaining professionally competent through Continuing Professional Development (CPD).

As a SEP, in order to maintain certification you are required to undertake approved development activities which gain “Professional Development Units” (PDUs). When you come to renew, you need to demonstrate you have acquired sufficient PDUs.

You can maintain a record of your activities with the INCOSE UK MyCareerPath® CPD tool.

Get involved

Do something extraordinary and share your proven Systems Engineering knowledge and skills through volunteering. There are many ways to give back to the Systems Engineering community and shape our future, including:

- Professional Development Mentors
- Certification Application Reviewers (CAR’s)
- Outreach