

Department of Electronic Systems Engineering (ESE)

Annual Progress Review (APR) – Research Students

Name:

SR Number:

Program (PhD / MTech (Res)):

Advisor(s):

Year of Joining:

Date of Review:

SECTION A – Research Problem, Motivation, Approach & Expected Impact

1. Problem Definition (What is the research problem?)

Please describe in clear and concise terms: (1) The exact research question(s) you are addressing, (2) The scope and boundaries of the problem & (3) Why this is a significant or difficult problem?

Student Response (250–400 words):

2. Motivation (Why are you working on this problem?)

Explain: (1) The scientific and engineering relevance, (2) The technological or scientific implications, (3) The broader context in which the problem sits & (4) Why this problem is worth solving?

Student Response (250–400 words):

3. Research Approach (How are you approaching this problem?)

Describe your methodology: (1) Experimental, theoretical, computational, or hybrid, (2) Key techniques, tools, architectures, or frameworks, (3) Dependencies or collaborations & (4) Planned milestones and strategy

Student Response (250–400 words):

4. Expected Impact (What impact do you expect your work to deliver?)

Explain in terms of: (1) Scientific advancement, (2) Technological innovation, (3) Industry relevance, (4) Long-term vision – if any.

Student Response (250–400 words):

SECTION B – Achievements & Research Output

1. Key Achievements This Year (Half Page Summary)

Prepare: (1) Major milestones achieved & (2) Key experimental/prototype/algorithmic breakthroughs – if any.

2. Research Output Summary

- Journal Publications:
- Conference Publications:
- Patents Filed/Granted:

SECTION C – Self-Assessment of Research Maturity

1. Which Stage of Research Training Are You At?

Please select ONE and justify with a short explanation (150–200 words).

- Stage 1: Learning How to Do Research (You rely heavily on your advisor for defining the problem, guiding the plan, and interpreting results.)
- Stage 2: Moving Toward Independent Research (You and your advisor co-develop the problem statement, approach, and analysis.)
- Stage 3: Near-Complete Independence (You can independently define sub-problems, design and execute plans, analyze results, and drive the project with minimal advisor intervention.)

Student Justification/Explanation (150–200 words):

SECTION D – Benchmarking Against Global Standards

1. Top Publication Venues in Your Field

List: (1) Top 5 Journals (prestigious, field-defining) & (2) Top 3 Conferences (flagship international events) & then indicate: (1) How far you are from publishing there, i.e. the gap and (2) If published already, provide details.

Student Response (List + 200–300 word analysis):

2. Top Research Groups in the World Working on Similar Problems

A. List 5 leading research groups globally: Name of PI / Research Group, their University / Institute and One-line description of overlap with your work.

Student Response (list):

B. Gap Assessment: (1) How far your work is from these benchmarks, (2) What differentiates your approach & (3) What you need (training, equipment, time, collaborations) to match or surpass them.

Student Response (200–300 words):

SECTION E – Plan & Roadmap for the Next Year

1. Detailed Research Plan (Next 12 Months)

Include: (1) Key questions to answer, (2) Plan & (3) Any Papers in the Pipeline (Venue?).

Student Response (400–500 words):

SECTION F – Advisor Feedback (To Be Completed by Advisor)

This section should include: (1) Assessment of student’s progress & assessment of research quality, (2) Evaluation of research independence and (3) Overall assessment.

Advisor’s Response (100–150 words):

SECTION G – DAP/DCC Comments & Final Recommendation

- Overall Assessment: _____

- Key Concerns – if any: _____

- Action Items for Next Review: _____
