**Gujarat Technological University**

L N MATRIX

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# NEED

Once product components are identified, evaluated and checked for novelty, Next Important task is to identify learning requirements well in advance

- Within syllabus contents
- Out of syllabus requirements

Learnings Need Matrix helps.

# LN Matrix (Paper size A2 – 18" x 24")

- LN – Learning Needs Matrix will help students to identify the learning requirements at an early stage along with prioritization of specific learning along with defined time duration/ time allocation for each.

- Identification will be focused with listing out Syllabus based and out of syllabus learning & skill development

# Learnings Need Matrix

**Group ID:** _____    **Date:** _____

*Establish connections among each other – Create Groups*

*Tools/ Methods/ Theories/ Application Process involved*

*Applicable standards and design specifications/ Principles & Experiments*

**During BE IV / Stage III**

**During BE III / Stage II**

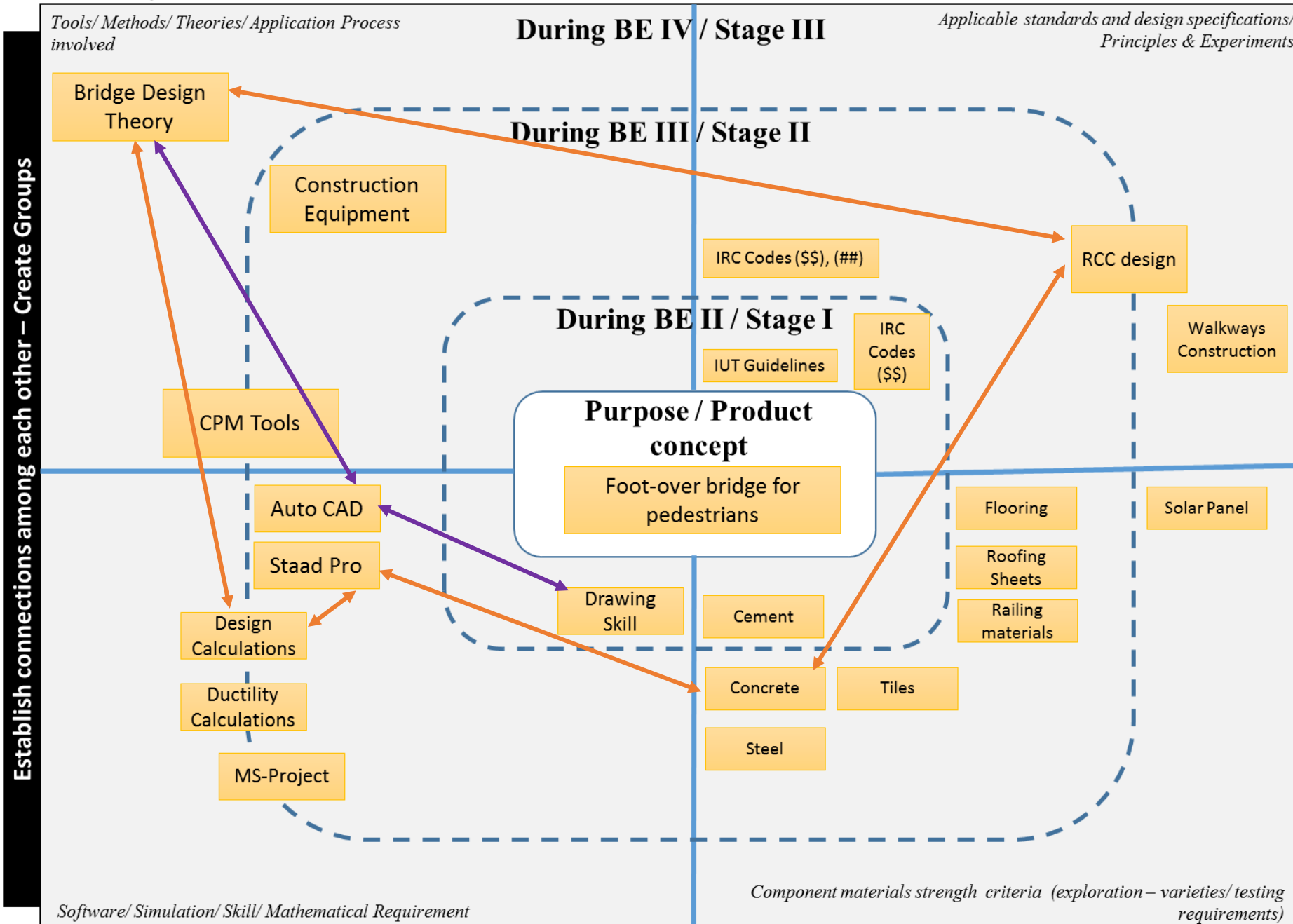**During BE II / Stage I**

**Purpose / Product concept**

*Software/ Simulation/ Skill/ Mathematical Requirement*

*Component materials strength criteria (exploration – varieties/ testing requirements)*

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# LN MATRIX

- Students are to identify requirements in each four dimensions
- Priority learning shall be taken up in Sem. IV of BE II (At least one from any of the four quadrants by each student)

- By the end of BE III Students will be developing working model. By that time, most of all quadrants shall be covered under learning.

- Supportive aspects (with least priority) shall be placed in BE IV.

- Discretion lies with faculty guide and student group to identify prioritization and set learning time line targets…

# Learnings Need Matrix

**During BE IV / Stage III**

*Tools/ Methods/ Theories/ Application Process involved*

*Applicable standards and design specifications/ Principles & Experiments*

**Establish connections among each other – Create Groups**

Bridge Design Theory

**During BE III / Stage II**

Construction Equipment

IRC Codes ($$), (##)

RCC design

**During BE II / Stage I**

IRC Codes ($$)

IUT Guidelines

Walkways Construction

CPM Tools

**Purpose / Product concept**

Foot-over bridge for pedestrians

Auto CAD

Flooring

Solar Panel

Staad Pro

Roofing Sheets

Drawing Skill

Cement

Railing materials

Design Calculations

Ductility Calculations

Concrete

Tiles

MS-Project

Steel

*Software/ Simulation/ Skill/ Mathematical Requirement*

*Component materials strength criteria (exploration – varieties/ testing requirements)*

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