

## An analysis of Objectives, Outcomes and SWOT - Parent Perspective for the B Tech Programme in Production Engineering

From time to time, The Department of Production Engineering, Govt. Engineering College Thrissur evaluates the attainment levels of the Programme Educational Objectives (PEO), Programme Outcomes (PO) and Programme Specific Outcomes (PSO) of the B Tech Programme and analyzes the Strength/Weakness/Opportunities/Threats (SWOT) of the programme. The PEO, PO, and PSO set are given in Part A and a SWOT matrix is given in Part B. Kindly go through each of the PEO, PO and PSOs and indicate your responses in Part A and the SWOT as identified by you in Part B. As a parent of the students of our programme, you would be in a position to judge our B Tech Degree programme in Production Engineering on how far the objectives / outcomes are achieved.

**Company Profile** 

Name of the			Address of Parent			
Parer	nt .					
Name of Student Year of		Year of Admission				
Date of Response						
Part A: Attainment of PEO and PO and PSO						
Fill up the boxes against each statement by giving your opinion as						
	Н	High level of attainment				
	M	Medium level of attainment				
	L	Low level of attainment				
No.		PROGRAM EDUCATIONAL (	OBJECTIVES (PEOs)	Attainment		
	()	udge at what level the following was a	ttained in your employees case)	Level H/M/L		
1		duction Engineering Programme have	sound engineering knowledge and problem			
	solving skills.					
2		duction Engineering Programme are in eering and management	spired to purse advanced degree and other			
3			ood engineering professionals who can find			
	roles in industry.		and engineering professionals three can ima			
4	Students of <b>Pro</b>	Juction Engineering Programme are or	riented towards developing socially relevant			
	products and services					
	products and ser	vices				
No.	products and ser	PROGRAMME OU	ITCOMES	Attainment		
No.				Attainment Level H/M/L		
No.	(J	PROGRAMME OU udge at what level the following was a wledge: Apply the knowledge of mathe	ttained in your employees case) ematics, science, engineering fundamentals and	Level H/M/L		
1	Engineering Kno	PROGRAMME OU  udge at what level the following was a  wledge: Apply the knowledge of mathe pecialization to the solution of complex	ettained in your employees case) ematics, science, engineering fundamentals and engineering problems.	Level H/M/L		
	Engineering Kno an engineering s Problem Analysi	PROGRAMME OU udge at what level the following was a wledge: Apply the knowledge of mathe pecialization to the solution of complex is: Identify, formulate review research	ematics, science, engineering fundamentals and engineering problems.  h literature, and analyze complex engineering	Level H/M/L		
1	Engineering Kno an engineering s Problem Analysi problems reaching	PROGRAMME OU udge at what level the following was a wledge: Apply the knowledge of mathe pecialization to the solution of complex is: Identify, formulate review research substantiated conclusions using first	ettained in your employees case) ematics, science, engineering fundamentals and engineering problems.	Level H/M/L		
1 2	Engineering Kno an engineering s Problem Analysi problems reaching engineering scien	PROGRAMME OU udge at what level the following was a wledge: Apply the knowledge of mathe pecialization to the solution of complex is: Identify, formulate review research substantiated conclusions using first nees.	ematics, science, engineering fundamentals and engineering problems.  h literature, and analyze complex engineering principles of mathematics, natural sciences and	Level H/M/L		
1	Engineering Kno an engineering s Problem Analysi problems reachin engineering scien Design/Develop	PROGRAMME OU udge at what level the following was a wledge: Apply the knowledge of mathe pecialization to the solution of complex is: Identify, formulate review research g substantiated conclusions using first nees.  ment of solutions: Design solutions if	ematics, science, engineering fundamentals and engineering problems.  h literature, and analyze complex engineering principles of mathematics, natural sciences and for complex engineering problems and design	Level H/M/L		
1 2	Engineering Kno an engineering s Problem Analysi problems reachin engineering scien Design/Develope system componer	PROGRAMME OU udge at what level the following was a wledge: Apply the knowledge of mathe pecialization to the solution of complex is: Identify, formulate review research g substantiated conclusions using first nees.  ment of solutions: Design solutions if	ematics, science, engineering fundamentals and engineering problems.  h literature, and analyze complex engineering principles of mathematics, natural sciences and for complex engineering problems and designed needs with appropriate consideration for the	Level H/M/L		
1 2	Engineering Kno an engineering s Problem Analys problems reachin engineering scien Design/Develop system compone public health and	PROGRAMME OU  udge at what level the following was a  wledge: Apply the knowledge of mathe pecialization to the solution of complex is: Identify, formulate review research ng substantiated conclusions using first nees.  ment of solutions: Design solutions of ents or processes that meet the specified disafety, and the cultural, societal and en	ematics, science, engineering fundamentals and engineering problems.  h literature, and analyze complex engineering principles of mathematics, natural sciences and for complex engineering problems and designed needs with appropriate consideration for the	Level H/M/L		
2	Engineering Kno an engineering s Problem Analysi problems reachine engineering scient Design/Develops system componer public health and Conduct investigincluding design	PROGRAMME OU  udge at what level the following was a  wledge: Apply the knowledge of mathe pecialization to the solution of complex is: Identify, formulate review research ing substantiated conclusions using first inces.  ment of solutions: Design solutions of ents or processes that meet the specified is safety, and the cultural, societal and en gations of complex problems: Use reso of experiments, analysis and interpretat	ematics, science, engineering fundamentals and engineering problems.  h literature, and analyze complex engineering principles of mathematics, natural sciences and for complex engineering problems and design and needs with appropriate consideration for the environmental considerations	Level H/M/L		
2	Engineering Kno an engineering s Problem Analys problems reachin engineering scien Design/Develop system compone public health and Conduct investig	PROGRAMME OU  udge at what level the following was a  wledge: Apply the knowledge of mathe pecialization to the solution of complex is: Identify, formulate review research ing substantiated conclusions using first inces.  ment of solutions: Design solutions of ents or processes that meet the specified is safety, and the cultural, societal and en gations of complex problems: Use reso of experiments, analysis and interpretat	ematics, science, engineering fundamentals and engineering problems.  In literature, and analyze complex engineering principles of mathematics, natural sciences and for complex engineering problems and designed needs with appropriate consideration for the invironmental considerations  earch-based knowledge and research methods	Level H/M/L		
2	Engineering Kno an engineering s Problem Analys problems reaching engineering scient Design/Develop system componer public health and Conduct investignic luding design provide valid commodern tool under the conduct investignic luding design provide valid commodern tool under the conduct investignic luding design provide valid commodern tool under the conduct investignic luding design provide valid commodern tool under the conduct investignic luding design provide valid commodern tool under the conduct investignic luding design provide valid commodern tool under the conduct investigation and the cond	PROGRAMME OU  udge at what level the following was a  wledge: Apply the knowledge of mathe pecialization to the solution of complex is: Identify, formulate review research ing substantiated conclusions using first inces.  ment of solutions: Design solutions of ents or processes that meet the specifie is safety, and the cultural, societal and en gations of complex problems: Use rese of experiments, analysis and interpretat inclusions.  sage: Create, select, and apply app	ematics, science, engineering fundamentals and engineering problems.  In literature, and analyze complex engineering principles of mathematics, natural sciences and for complex engineering problems and design and needs with appropriate consideration for the invironmental considerations earch-based knowledge and research methods tion of data, and synthesis of the information to propriate techniques, resources and modern	Level H/M/L		
3	Engineering Kno an engineering s Problem Analysi problems reachinengineering scient Design/Develope system component public health and Conduct investig including design provide valid cor Modern tool un engineering and	PROGRAMME OU  udge at what level the following was a  wledge: Apply the knowledge of mathe pecialization to the solution of complex is: Identify, formulate review research ing substantiated conclusions using first inces.  ment of solutions: Design solutions of ents or processes that meet the specifie id safety, and the cultural, societal and en gations of complex problems: Use rese of experiments, analysis and interpretat inclusions.  sage: Create, select, and apply app IT tools including prediction and mode	ematics, science, engineering fundamentals and engineering problems.  h literature, and analyze complex engineering principles of mathematics, natural sciences and for complex engineering problems and designed needs with appropriate consideration for the nvironmental considerations  earch-based knowledge and research methods tion of data, and synthesis of the information to	Level H/M/L		
1 2 3 4	Engineering Kno an engineering s Problem Analysi problems reachinengineering scient Design/Develope system component public health and Conduct investigincluding design provide valid community and understanding of the conduct investiging provide valid community and understanding of the conduct investiging provide valid community and understanding of the conduct investiging and understanding of the conduct investigation and	PROGRAMME OU  udge at what level the following was a  wledge: Apply the knowledge of mathe pecialization to the solution of complex is: Identify, formulate review research ing substantiated conclusions using first inces.  ment of solutions: Design solutions of ents or processes that meet the specified disafety, and the cultural, societal and en gations of complex problems: Use reso of experiments, analysis and interpretate inclusions.  sage: Create, select, and apply app IT tools including prediction and mode of the limitations.	ematics, science, engineering fundamentals and engineering problems.  In literature, and analyze complex engineering principles of mathematics, natural sciences and for complex engineering problems and design and needs with appropriate consideration for the invironmental considerations earch-based knowledge and research methods tion of data, and synthesis of the information to propriate techniques, resources and modern telling to complex engineering activities with an	Level H/M/L		
3	Engineering Kno an engineering s Problem Analys problems reachin engineering scien Design/Develop system compone public health and Conduct investig including design provide valid cor Modern tool u engineering and understanding of The Engineer and	PROGRAMME OU  udge at what level the following was a  wledge: Apply the knowledge of mathe pecialization to the solution of complex is: Identify, formulate review research ing substantiated conclusions using first inces.  ment of solutions: Design solutions of ents or processes that meet the specified disafety, and the cultural, societal and en igations of complex problems: Use reso of experiments, analysis and interpretate inclusions.  sage: Create, select, and apply app IT tools including prediction and mode of the limitations.  d Society: Apply reasoning informed b	ematics, science, engineering fundamentals and engineering problems.  In literature, and analyze complex engineering principles of mathematics, natural sciences and for complex engineering problems and design and needs with appropriate consideration for the invironmental considerations earch-based knowledge and research methods attion of data, and synthesis of the information to propriate techniques, resources and modern celling to complex engineering activities with an analytic techniques and the contextual knowledge to assess societal,	Level H/M/L		
1 2 3 4	Engineering Kno an engineering s Problem Analys problems reachin engineering scien Design/Develop system compone public health and Conduct investig including design provide valid cor Modern tool u engineering and understanding of The Engineer an health, safety, le	PROGRAMME OU  udge at what level the following was a  wledge: Apply the knowledge of mathe pecialization to the solution of complex is: Identify, formulate review research ing substantiated conclusions using first inces.  ment of solutions: Design solutions of ents or processes that meet the specifie id safety, and the cultural, societal and en estations of complex problems: Use rese of experiments, analysis and interpretat inclusions.  sage: Create, select, and apply app IT tools including prediction and mode of the limitations.  d Society: Apply reasoning informed b gal and cultural issues and the consequence.	ematics, science, engineering fundamentals and engineering problems.  In literature, and analyze complex engineering principles of mathematics, natural sciences and for complex engineering problems and design and needs with appropriate consideration for the invironmental considerations earch-based knowledge and research methods tion of data, and synthesis of the information to propriate techniques, resources and modern telling to complex engineering activities with an	Level H/M/L		
1 2 3 4	Engineering Kno an engineering some problems reaching engineering scient pesign/Development of the Engineering and understanding of the Engineering process.	wledge : Apply the knowledge of mather pecialization to the solution of complex is: Identify, formulate review research growth substantiated conclusions using first inces.  ment of solutions: Design solutions of ents or processes that meet the specified safety, and the cultural, societal and entations of complex problems: Use resoft experiments, analysis and interpretated culturions.  sage: Create, select, and apply applications including prediction and mode of the limitations.  d Society: Apply reasoning informed by gal and cultural issues and the consequence.	ematics, science, engineering fundamentals and engineering problems.  In literature, and analyze complex engineering principles of mathematics, natural sciences and for complex engineering problems and design and needs with appropriate consideration for the natural considerations earch-based knowledge and research methods ation of data, and synthesis of the information to propriate techniques, resources and modern telling to complex engineering activities with an early the contextual knowledge to assess societal, ent responsibilities relevant to the professional	Level H/M/L		
1 2 3 4	Engineering Kno an engineering some problem Analysis problems reaching engineering scient Design/Development of the Engineering and understanding of The Engineering process of the Eng	PROGRAMME OU  udge at what level the following was a  wledge: Apply the knowledge of mathe pecialization to the solution of complex is: Identify, formulate review research ing substantiated conclusions using first inces.  ment of solutions: Design solutions of ents or processes that meet the specified disafety, and the cultural, societal and en gations of complex problems: Use rese of experiments, analysis and interpretate acclusions.  sage: Create, select, and apply app IT tools including prediction and mode of the limitations.  d Society: Apply reasoning informed b gal and cultural issues and the consequence ind sustainability: Understand the impa-	ematics, science, engineering fundamentals and engineering problems.  In literature, and analyze complex engineering principles of mathematics, natural sciences and for complex engineering problems and design and needs with appropriate consideration for the invironmental considerations earch-based knowledge and research methods attion of data, and synthesis of the information to propriate techniques, resources and modern celling to complex engineering activities with an analytic techniques and the contextual knowledge to assess societal,	Level H/M/L		

8	<b>Ethics:</b> Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice			
9	<b>Individual and Team work:</b> Function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings.			
10	<b>Communication:</b> Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentation, and give and receive clear instruction			
11	<b>Project management and finance:</b> Demonstrate knowledge and undertaking of engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects in multi-disciplinary environments			
12	<b>Life-long learning:</b> Recognise the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change			
No.	PROGRAMME SPECIFIC OUTCOMES	Attainment		
	(Judge at what level the following was attained in your employees case)	Level H/M/L		
1	Students of <b>Production Engineering Programme</b> have clear understanding of the Production systems and their management			
2	Students of <b>Production Engineering Programme</b> have the ability to understand, model and solve problems related to manufacturing areas			
	Part B : SWOT Analysis			
List the major strengths of the programme as evaluated from the performance of employees in your organization from our UG programme (list out those internal factors and positive advantages which are originating from the programme or inherent to the programme and are helpful in achieving the objectives/outcomes; PEO/ PO/PSO)				
List the major weakness of the programme as evaluated from the performance of employees in your organization from our UG programme (list out those internal factors and negative disadvantages which are originating from the programme or inherent to the programme and detract and harmful in achieving the objectives/outcomes; PEO/ PO/PSO)				
List the major opportunities of the programme as evaluated from the performance of employees in your organization from our UG programme (list out those external positive attractive factors which are originating from the environment or outside institution and are helpful in achieving the objectives/outcomes; PEO/ PO/PSO)				
List the major threats of the programme as evaluated from the performance of employees in your organization from our UG programme (list out those external negative detrimental or disadvantages originating from the environment or outside institution and detract and harmful achieving the objectives/outcomes; PEO/ PO/PSO)				

Signature of the respondent

## We thankfully appreciate your willingness to associate with our evaluation process.

After completing the form, kindly send a scanned copy of the form to <code>hodpe@gectcr.ac.in</code> or send the printout version of this form to the address given below.

Head of the Department Department of Production Engineering Govt. Engineering College Thrissur Thrissur-9, Kerala