

R1-EE315: RUBRIC FOR EVALUATING PROGRAM OUTCOME 1

(Student Outcome 1) An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

Performance Indicator	Exemplary 4	Satisfactory 3	Developing 2	Unsatisfactory 1
Formulate mathematical performance expressions for descriptive engineering problems.	Comprehensive mathematical formulation of any problem	Comprehensive mathematical formulation of basic problems	Partial mathematical formulation of any problem	Fails to mathematically formulate descriptive basic engineering problems
Utilize probabilistic functions (e.g., PDF, CDF, and CF) of random variables to calculate probabilistic performance measures.	Utilize all probabilistic functions to calculate any probabilistic performance	Utilize some probabilistic functions to calculate basic probabilistic performance	Utilize some probabilistic functions to calculate basic probabilistic performance	Fails to utilize probabilistic functions to calculate basic probabilistic performance
Derive the probabilistic features (mean, variance, autocorrelation, power spectral density) for stationary random processes.	Derive all features for all random processes in time and frequency	Derive some important features for random processes (mean, and variance) and understand stationarity concepts	Understand the basic meaning of random processes	Does not understand the basic meaning of random processes

Notes:

Evaluation of students' performance using this rubric is based generally on: H.W. assignments, quizzes, major exams, design project, and especially the final exam.

Notes:

- The instructors must assign specific questions or part of a question to handle each performance indicator **3 times** during the term in exams and HWs ...
- instructors should agree together on that very specifically
- instructors should make sure to provide the results for EE and AEE separately
- instructors should be informed of our rules how to count DN students and F students etc. as agreed before.