

SEMESTER Second	DEPARTMENT General Engineering	COURSE TITLE Mathematics II
COURSE CODE EG201	HOURS: 3 UNITS: 3	COURSE SPECIFICATIONS Theoretical Contents

1. Integration:

- Indefinite integrals.
- Integrals methods.
- Integration by substitution.
- Integration of exponential functions.
- Trigonometric functions and inverse of trigonometric functions.

2. Partial Fractions Method and Partial Integration.

3. Definite Integrals and Their Application.

4. Double Integrals and Third integrals.

5. Fourier Series:

- Definition.
- Odd and even functions.
- Periodic functions.
- Several special integrals.
- Fourier coefficients.
- Fourier series on interval (- ,).
- Fourier interval on (-L , L).

References:

. , 1974 — — حساب التفاضل والتكامل والهندسة التحليلية ،