



KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN  
INSTITUT TEKNOLOGI KALIMANTAN

MINISTRY OF EDUCATION AND CULTURE  
INSTITUT TEKNOLOGI KALIMANTAN

# TRANSKRIP/ACADEMIC TRANSCRIPT

Nomor Ijazah Nasional (NINA)/National Diploma Numbering : 452012020000103  
Nomor/Number : 536/ITK-9/JSTPK-2/S1/2020

Jurusan/Department : Sains, Teknologi Pangan, dan Kemaritiman/  
Science, Food Technology, and Maritime  
Program Studi/Study Program : Fisika/  
Physics  
Nama/Name : Fikri Abdillah  
NIM/ID No : 01161011  
Tempat, Tgl Lahir/  
Place, Date of Birth : Tarakan, 08 November 1998/  
Tarakan, November 08<sup>th</sup>, 1998

Gelar/Degree : Sarjana Sains (S.Si.)  
Bachelor of Science  
Indeks Prestasi/GPA : 3.29  
Tahun Masuk/Entrance Year : 2016  
Tahun Lulus/Graduation Year : 2020  
Lama Studi/Length of Study : 8 Semester  
Predikat/Predicate : Sangat Memuaskan/Very Satisfactory  
Tanggal Lulus/Graduation Date : 27 Agustus 2020/August 27<sup>th</sup>, 2020

No	Kode	Mata Kuliah	Sem	Kr	Nilai
	Code	Subject		Cr	Grade
1	FI1001	Fisika Dasar I	1	3	AB
		<i>Fundamental of Physics I</i>			
2	FI1102	Biologi Umum	1	2	B
		<i>Biology</i>			
3	FI1103	Aljabar Linier	1	3	A
		<i>Linear Algebra</i>			
4	KI1001	Kimia Dasar	1	2	C
		<i>Fundamental of Chemistry</i>			
5	KU1003	Teknik Komunikasi Ilmiah	1	2	AB
		<i>Scientific Communication Method</i>			
6	KU1004	Bahasa Inggris	1	2	AB
		<i>English</i>			
7	MA1001	Kalkulus I	1	3	AB
		<i>Calculus I</i>			
8	EL1003	Algoritma dan Pemrograman	2	3	AB
		<i>Algorithm and Programming</i>			
9	FI1004	Fisika Dasar II	2	3	B
		<i>Fundamental of Physics II</i>			
10	FI1105	Fisika Madya	2	4	BC
		<i>Middle Physics</i>			
11	KI1102	Laboratorium Kimia Dasar	2	1	AB
		<i>Fundamental Chemistry Laboratory</i>			
12	KU1006	Agama Islam	2	2	A
		<i>Religion</i>			
13	MA1004	Kalkulus II	2	3	A
		<i>Calculus II</i>			
14	MA1005	Pengantar Metode Statistik	2	3	BC
		<i>Introduction to Statistical Method</i>			
15	FI1106	Fisika Modern I	3	3	A
		<i>Modern Physics I</i>			
16	FI1110	Fisika Matematika I	3	4	AB
		<i>Mathematical Physics I</i>			
17	FI1111	Gelombang I	3	2	AB
		<i>Wave I</i>			
18	FI1207	Termodinamika	3	4	AB
		<i>Thermodynamics</i>			
19	FI1208	Mekanika I	3	3	B
		<i>Mechanics I</i>			
20	FI1209	Elektronika Dasar I	3	3	BC
		<i>Basic Electronics I</i>			

## Catatan Nilai/Grade Explanation (Point) :

A : Istimewa/Excellent (4)  
AB : Baik Sekali/Very Good (3.5)  
B : Baik/Good (3)  
BC : Cukup Baik/Sufficient (2.5)  
C : Cukup/Fair (2)  
D : Kurang/Poor (1)  
E : Kurang Sekali/Very Poor (0)

No	Kode	Mata Kuliah	Sem	Kr	Nilai
	Code	Subject		Cr	Grade
21	FI1115	Fisika Modern II	4	3	B
		<i>Modern Physics II</i>			
22	FI1212	Fisika Matematika II	4	4	A
		<i>Mathematical Physics II</i>			
23	FI1213	Mekanika II	4	3	BC
		<i>Mechanics II</i>			
24	FI1214	Elektronika Dasar II	4	3	C
		<i>Basic Electronics II</i>			
25	FI1216	Gelombang II	4	2	B
		<i>Wave II</i>			
26	FI1217	Fisika Laboratorium	4	2	AB
		<i>Laboratory Physics</i>			
27	KU1011	Wawasan Teknologi dan Lingkungan	4	3	B
		<i>Technology and Environmental Educations</i>			
28	FI1121	Ilmu Bahan I	5	2	BC
		<i>Material Science I</i>			
29	FI1218	Metode Numerik	5	3	BC
		<i>Numerical Method</i>			
30	FI1219	Fisika Kuantum I	5	3	AB
		<i>Quantum Physics I</i>			
31	FI1220	Geofisika Dasar	5	2	BC
		<i>Basic Geophysics</i>			
32	FI1222	Medan Elektromagnetik I	5	3	AB
		<i>Electromagnetics I</i>			
33	FI1223	Fisika Zat Padat I	5	3	BC
		<i>Solid State Physics I</i>			
34	FI1128	Ilmu Bahan II	6	2	AB
		<i>Material Science II</i>			
35	FI1224	Medan Elektromagnetik II	6	3	AB
		<i>Electromagnetics II</i>			
36	FI1225	Fisika Komputasi	6	3	AB
		<i>Computational Physics</i>			
37	FI1226	Fisika Kuantum II	6	3	AB
		<i>Quantum Physics II</i>			
38	FI1227	Geologi Dasar	6	2	AB
		<i>Basic Geology</i>			
39	FI1229	Fisika Zat Padat II	6	3	AB
		<i>Solid State Physics II</i>			
40	FI1230	Elektronika	6	2	AB
		<i>Electronics</i>			

No	Kode	Mata Kuliah	Sem	Kr	Nilai
	Code	Subject		Cr	Grade
41	FI1231	Fisika Inti	7	2	A
		<i>Nuclear Physics</i>			
42	FI1232	Fisika Statistik I	7	3	AB
		<i>Statistical Physics I</i>			
43	FI1233	Fisika Instrumentasi	7	2	BC
		<i>Instrumentation Physics</i>			
44	FI1234	Fisika Energi Terbarukan	7	2	B
		<i>Physics of Renewable Energy</i>			
45	FI1237	Kerja Praktik	7	2	A
		<i>Internship</i>			
46	FI1340	Fisika Polimer	7	2	AB
		<i>Polymer Physics</i>			
47	FI1343	Fisika Bahan Lanjut	7	2	A
		<i>Advanced Material Physics</i>			
48	KU1002	Technopreneurship	7	3	B
		<i>Technopreneurship</i>			
49	KU1005	Wawasan Kebangsaan	7	2	AB
		<i>Nationalism</i>			
50	FI1235	Fisika Inti II	8	2	AB
		<i>Nuclear Physics II</i>			
51	FI1236	Fisika Statistik II	8	3	BC
		<i>Statistical Physics II</i>			
52	FI1238	Tugas Akhir II	8	6	A
		<i>Final Project II</i>			
53	FI1341	Fisika Semikonduktor	8	2	A
		<i>Physics of Semiconductor</i>			
54	FI1342	Fisika Bahan Komposit	8	2	A
		<i>Composite Physics</i>			
Jumlah Kredit/Total of Credits				144	

## Tugas Akhir/Final Project

Mesin Brayton Kuantum Berbasis Partikel Tunggal Relativistik dan Non-relativistik sebagai Substansi Kerja dalam Kotak Potensial Simetris 1, 2, dan 3 Dimensi  
*Quantum Brayton Engine Based on a Relativistic and Non-relativistic Particle as a Working Substance in 1, 2, and 3 Dimensional Symmetric Potential Box*

Pembimbing/Advisor : 1. Fadli Robiandi, S.Si., M.Si.  
2. Yohanes Dwi Saputra, S.Si., M.Si.

Pangkalan, 2 September 2020  
  
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