

ENVIRONMENTAL STUDIES - TECHNOLOGIES IN DIGITAL AGRICULTURE

**A Project submitted to Fatima College (Autonomous), Madurai-18.
In partial fulfilment of the requirements of the award of the Degree of
BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY**

Submitted By

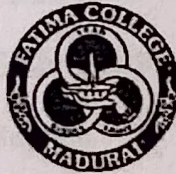
Ms.K.Aarthi Sreetha	(2021IT01)
Ms. M.Aruna	(2021IT07)
Ms. J.J.Christina Nivetha	(2021IT10)
Ms. A.Infant Namitha	(2021IT14)
Ms. M.G.Shri Abishini	(2021IT34)
Ms. R.Supraja	(2021IT39)
Ms. K.Thanika Devi	(2021IT43)

Under the Guidance of

Dr. N. Kalaichelvi, MCA, M. Phil, Ph. D

Assistant Professor

Department of Information Technology



Fatima College (Autonomous)

Re-Accredited with 'A++' Grade by NAAC (Cycle-IV)

Maryland, Madurai – 625018

November, 2022



FATIMA COLLEGE (AUTONOMOUS)

Re-Accredited with 'A++' by NAAC (Cycle - IV)
Mary Land, Madurai

To Whomsoever It May Concern

This is to certify that the following students have completed their student project work under the guidance of DR.N.KALAICHELVI, Assistant Professor of DEPARTMENT OF INFORMATION TECHNOLOGY for the Academic Year 2022-2023.

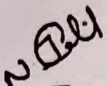
S. No.	Reg. No.	Name of the Students	Title of the Project
1.	2021IT01	K. Aarthi Sreetha	ENVIRONMENTAL STUDIES- TECHNOLOGIES IN DIGITAL AGRICULTURE
2.	2021IT07	M.Aruna	
3.	2021IT10	J. J.Christina Nivetha	
4.	2021IT14	A. Infant Namitha	
5.	2021IT34	M.G.Shri Abishini	
6.	2021IT39	R. Supraja	
7.	2021IT43	K.Thanika Devi	

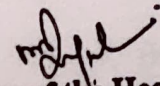
N. G. S.
Project Guide

[Signature]
Co-ordinator,
Environmental Studies

CERTIFICATE

This is to certify that this project entitled "Environmental Studies - Technologies In Digital Agriculture" submitted by Ms. K. Aarthi Sreetha, Ms. M.Aruna, Ms. J. J.Christina Nivetha, Ms. A. Infant Namitha, Ms. M.G.Shri Abishini, Ms. R. Supraja, Ms. K.Thanika Devi, for the degree of Bachelor of science is based on the result of studies carried out by them under my guidance and supervision in the Department of information Technology, Fatima college (Autonomous), Madurai-18. This project has not been submitted elsewhere for any other degree.


Course Teacher


Signature of the Head of the Department

Place: Madurai

Date: 18/11/2022

DECLARATION

We do hereby declare that this work has been originally carried out by us under the guidance and supervision of Dr. N. Kalaichelvi, Assistant Professor in the Department of Information Technology, Fatima College (Autonomous), Madurai-18 and this work has not been submitted elsewhere for any other degree.

Place : Madurai

Date: 18/11/2022

K. Aarthi Sreetha
Ms. K.Aarthi Sreetha(2021IT01)

M. Aruna
Ms. M.Aruna(2021IT07)

Christina
Ms. J. J.Christina Nivetha(2021IT10)

A. Infant Namitha
Ms. A.Infant Namitha(2021IT14)

M.G. Shri Abishini
Ms. M.G.Shri Abishini(2021IT34)

R. Supraja
Ms. R.Supraja(2021IT39)

K. Thanika Devi
Ms. K.Thanika Devi(2021IT43)

ENVIRONMENTAL STUDIES - ANALYSIS OF CARBON FOOTPRINT AND CLIMATE CHANGE

A Project submitted to Fatima College (Autonomous), Madurai -18

In partial fulfillment of the requirements of the award of the degree of
BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

Submitted By

Ms. J. AKCHAYA	(2021IT02)
Ms. N. ANISHA	(2021IT05)
Ms. K. BOOMA	(2021IT08)
Ms. D. DIVYA DHARSHINI	(2021IT12)
Ms. S. PARI VARTHINI	(2021IT24)
Ms. V. SANKARESWARI	(2021IT27)
Ms. S. SURUTHIKESH	(2021IT41)

Under the guidance of

Dr. N. KALAICHELVI, MCA, M.Phil, Ph. D

Assistant professor,

Department of Information Technology



FATIMA COLLEGE (Autonomous)

Re-Accredited with 'A++' Grade by NAAC(Cycle-IV)

Maryland, Madurai-625018, Tamil Nadu

November, 2022



FATIMA COLLEGE (AUTONOMOUS)

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Mary Land, Madurai

To Whomsoever It May Concern

This is to certify that the following students have completed their student project work under the guidance of Dr. N. Kalaichelvi, Assistant Professor of Department of Information Technology for the Academic Year 2022-2023.

S. No.	Reg. No.	Name of the Students	Title of the Project
1	2021IT02	J.Akchaya	ENVIRONMENTAL STUDIES -ANALYSIS OF CARBON FOOTPRINT AND CLIMATE CHANGE
2	2021IT05	N.Anisha	
3	2021IT08	K.Booma	
4	2021IT12	S.Divya Dharshini	
5	2021IT24	S.Pari Varthini	
6	2021IT27	V.Sankareswari	
7	2021IT41	S.Suruthikesh	

N.B.
Project Guide

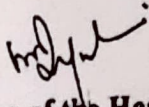
[Signature]
Co-Ordinator,
Environmental Studies

CERTIFICATE

This is to certify that this project entitled "Environmental Studies - Analysis of Carbon Footprint and Climate Change" submitted by Ms.J.Akchaya, Ms.N.Anisha, Ms.K.Booma, Ms.S.Divya Dharshini, Ms.S.Pari Varthini, Ms.V.Sankareswari, Ms.S.Suruthikesh for the degree of bachelor of science is based on the result of studies carried out by them under my guidance and supervision in the Post Graduate Department of IT, Fatima college (Autonomous), Madurai-18. This project has not been submitted elsewhere for any other degree.



Course Teacher



Signature of the Head of the Department

Place: Madurai

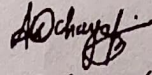
Date: 18/11/2022

DECLARATION

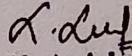
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Place: Madurai

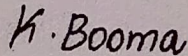
Date: 18/11/2022



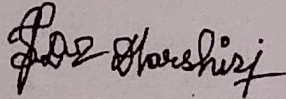
Ms. J. Akchaya (2021IT02)



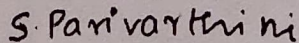
Ms. N. Anisha (2021IT05)



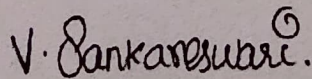
Ms. K. Booma (2021IT08)



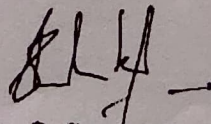
Ms. S. Divya Dharshini (2021IT12)



Ms. S. Pari Varthini (2021IT24)



Ms. V. Sankareswari (2021IT27)



Ms. S. Suruthikesh (2021IT41)

ENVIRONMENTAL STUDIES - IMPACT OF AGRICULTURE ON CLIMATE CHANGE

**A Project submitted to Fatima College (Autonomous), Madurai – 18
In Partial Fulfilment of the requirements of the Award of the degree of
BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY**

Submitted By

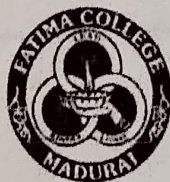
S. Sherin Aathifa	(2021IT33)
T. Sowmiya Sri	(2021IT36)
R. Amirtha Varshini	(2021IT03)
A. Chithra	(2021IT09)
M. Shara Afrin	(2021IT47)
R.C. Swathi	(2021IT42)
V. Preethi	(2021IT26)

Under the Guidance of

Dr.N.Kalaichelvi, MCA, M.Phil, Ph.D

Assistant Professor

Department of Information Technology



Fatima College (Autonomous)

Re-Accredited with 'A++' Grade by NAAC (Cycle-IV)

Maryland, Madurai – 625018

November, 2022



FATIMA COLLEGE (AUTONOMOUS)

Re-Accredited with 'A++' by NAAC (Cycle - IV)
Mary Land, Madurai

To Whomsoever It May Concern

This is to certify that the following students have completed their student project work under the guidance of Dr.N.KALAICHELVI, Assistant Professor of DEPARTMENT OF INFORMATION TECHNOLOGY for the Academic Year 2022-2023.

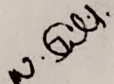
S. No.	Reg. No.	Name of the Students	Title of the Project
1.	2021IT33	S. Sherin Aathifa	ENVIRONMENTAL STUDIES-IMPACT OF · AGRICULTURE ON CLIMATE CHANGE
2.	2021IT36	T. Sowmiya Sri	
3.	2021IT03	R. Amirtha Varshini	
4.	2021IT09	A.Chithra	
5.	2021IT47	M. Shara Afrin	
6.	2021IT42	R.C. Swathi	
7.	2021IT26	V. Preethi	

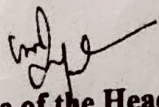
N. B. L.
Project Guide

Chud
Co-ordinator,
Environmental Studies

CERTIFICATE

This is to certify that this project entitled "Environmental Studies - Impact of Agriculture on Climate Change" submitted by Ms. Sherin Aathifa.S, Ms. Sowmiya Sri.T, Ms. Amirtha Varshini.R, Ms. Chithra.A, Ms. Shara Afrin.M, Ms. Swathi.R.C, Ms. Preethi.V for the degree of bachelor of science is based on the result of studies carried out by them under my guidance and supervision in the department of information Technology, Fatima college (Autonomous), Madurai-18. This project has not been submitted elsewhere for any other degree.


Course Teacher


Signature of the Head of the Department

Place: Madurai

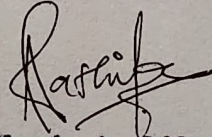
Date: 18/11/2022

DECLARATION

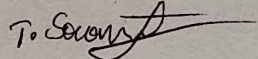
We do hereby declare that this work has been originally carried out by us under the guidance and supervision of **Dr.N.Kalaichelvi**, Assistant Professor in the Department of Information Technology, Fatima College (Autonomous), Madurai-18 and this work has not been submitted elsewhere for any other degree.

Place: Madurai

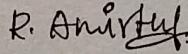
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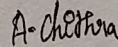
Ms. Sherin Aathifa .S (2021IT33)



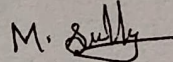
Ms. Sowmiya Sri .T (2021IT36)



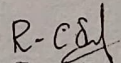
Ms. Amirtha Varshini .R (2021IT03)



Ms. Chithra. A (2021IT09)



Ms. Shara Afrin .M (2021IT47)



Ms. Swathi .R.C (2021IT42)



Ms. Preethi .V (2021IT26)

ENVIRONMENTAL STUDIES - THE EFFECT OF AGRO CHEMICAL ON THE SOIL ENVIRONMENT

A Project submitted to Fatima College (Autonomous), Madurai – 18

In partial fulfilment of the requirements of the award of the degree of
BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

Submitted By

Ms. S. Angala Esuwari	(2021IT04)
Ms. V. Monika	(2021IT20)
Ms. B. Shanofin Azmi	(2021IT30)
Ms. B. Subha Sri	(2021IT38)
MS. V. Supraja	(2021IT40)
Ms. G. Thirishika	(2021IT44)
Ms. G. Nagakeshika	(2021IT46)

Under the Guidance of

Dr.N.Kalaichelvi, MCA, M.Phil, Ph.D

Assistant Professor

Department of Information Technology



Fatima College (Autonomous)

Re-Accredited with 'A++' Grade by NAAC (Cycle-IV)

Maryland, Madurai – 625018

November, 2022



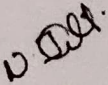
FATIMA COLLEGE (AUTONOMOUS)

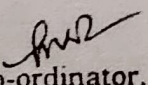
Re-Accredited with 'A++' by NAAC (Cycle - IV)
Mary Land, Madurai

To Whomsoever It May Concern

This is to certify that the following students have completed their student project work under the guidance of Dr.N.KALAICHELVI, Assistant Professor of DEPARTMENT OF INFORMATION TECHNOLOGY for the Academic Year 2022-2023.

S. No.	Reg. No.	Name of the Students	Title of the Project
1	2021IT04	S.Angala Esuwari	ENVIRONMENTAL STUDIES-THE EFFECT OF AGRO CHEMICAL IN THE SOIL ENVIRONMENT
2	2021IT20	V.Monika	
3	2021IT30	B.Shanofin Azmi	
4	2021IT38	B.Subha sri	
5	2021IT40	V.Supraja	
6	2021IT44	G.Thirishika	
7	2021IT46	G.Nagakeshika	


Project Guide

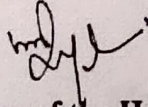

Co-ordinator,
Environmental Studies

CERTIFICATE

This is to certify that this project entitled "Environmental Studies - The Effect of Agro Chemical on The Soil Environment " submitted by Ms. S. Angala Esuwari, Ms. V.Monika, Ms. G.Nagakeshika, Ms. B.Subha sri, Ms. V. Supraja, Ms. B. Shanofin Azmi, Ms. G.Thirishika for the degree of bachelor of science is based on the result of studies carried out by them under my guidance and supervision in the Under Graduate Department of IT, Fatima college (Autonomous), Madurai-18. This project has not been submitted elsewhere for any other degree

N. S. S.

Course Teacher



Signature of the Head of the Department

Place: Madurai

Date: 18/11/2022

DECLARATION

We do hereby declare that this work has been originally carried out by us under the guidance and supervision of Dr.N.Kalaichelvi, Assistant Professor in the Department of Information Technology, Fatima College (Autonomous), Madurai-18 and this work has not been submitted elsewhere for any other degree.

Place: Madurai

Date: 18/11/2022

S. Angala Esuwari

Ms. S. Angala Esuwari (2021IT04)

V. Monika

Ms. V. Monika (2021IT20)

B. Shanofin Azmi

Ms. B. Shanofin Azmi(2021IT30)

B. Subha sri

Ms. B. Subha sri (2021IT38)

V. Supraja

Ms. V. Supraja(2021IT40)

G. Thirishika

Ms. G. Thirishika(2021IT44)

G. Nagakeshika

Ms. G. Nagakeshika (2021IT46)

ENVIRONMENTAL STUDIES - ANALYSIS ON ENERGY USAGE AND CONSERVATION THROUGH TECHNOLOGY

A Project submitted to Fatima College (Autonomous), Madurai – 18

In partial fulfilment of the requirements of the award of the degree of
BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

Submitted By

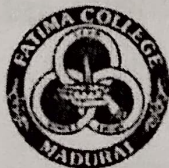
Ms.Archana.K	(2021IT06)
Ms.Jenithapriyadharshini.K	(2021IT15)
Ms. Nagalakshmi.K	(2021IT21)
Ms. Sarumathi.S	(2021IT28)
Ms.Soniya.R	(2021IT35)
Ms.Sri Varshini.T N	(2021IT37)
Ms.Viveka.N.R	(2021IT45)

Under the Guidance of

Dr.N.Kalaichelvi, MCA, M.Phil, Ph.D

Assistant Professor

Department of Information Technology



Fatima College (Autonomous)

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Maryland, Madurai – 625018

November, 2022



FATIMA COLLEGE (AUTONOMOUS)

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Mary Land, Madurai**

To Whomsoever It May Concern

This is to certify that the following students have completed their student project work under the guidance of Dr.N.KALAICHELVI, Assistant Professor of DEPARTMENT OF INFORMATION TECHNOLOGY for the Academic Year 2022-2023.

S. No.	Reg. No.	Name of the Students	Title of the Project
1.	2021IT06	K. Archana	ENVIRONMENTAL STUDIES-ANALYSIS ON ENERGY USAAGE AND CONSERVATION THROUGH TECHNOLOGY
2.	2021IT15	K. Jenithapriyadharshini	
3.	2021IT21	K. Nagalakshmi	
4.	2021IT28	S. Sarumathi	
5.	2021IT35	R. Soniya	
6.	2021IT37	T N. Sri Varshini	
7.	2021IT45	N.R. Viveka	

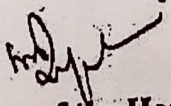
N. D. K.
Project Guide

[Signature]
Co-ordinator,
Environmental Studies

CERTIFICATE

This is to certify that this project entitled "Environmental Studies - Analysis On Energy Usage And Conservation Through Technology" submitted by Ms. Archana.K, Ms. Jenlthapriyadharshini.K, Ms. Nagalakshmi.K, Ms. Sarumathi.S, Ms. Soniya.R, Ms. Sri Varshini.T N, Ms. Vivekn.N.R, for the degree of Bachelor of science is based on the result of studies carried out by them under my guidance and supervision in the Department of information Technology, Fatima college (Autonomous), Madurai-18. This project has not been submitted elsewhere for any other degree.

P. D. B.
Course Teacher


Signature of the Head of the Department

Place: Madurai

Date: 18/11/2022

DECLARATION

We do hereby declare that this work has been originally carried out by us under the guidance and supervision of Dr.N.Kalaichelvi, Assistant Professor in the Department of Information Technology, Fatima College (Autonomous), Madurai-18 and this work has not been submitted elsewhere for any other degree.

Place: Madurai

Date: 18/11/2022

K. Archana

Ms.Archana.K (2021IT06)

K. Jenithapriyadharshini

Ms.Jenithapriyadharshini.K (2021IT15)

K. Nagalakshmi

Ms.Nagalakshmi.K (2021IT21)

S. Sarumathi

Ms.Sarumathi.S (2021IT28)

R. Soniya

Ms.Soniya.R (2021IT35)

Sri Varshini

Ms.Sri Varshini.T N (2021IT37)

N.R.Viveka

Ms.Viveka.N.R (2021IT45)

ENVIRONMENTAL STUDIES - BIODIVERSITY LOSS AND ITS IMPACT ON AGRICULTURE

A Project submitted to Fatima College (Autonomous), Madurai – 18

In partial fulfilment of the requirements of the award of the degree of
BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

Submitted By

Ms.S.Kavisri	(2021IT16)
Ms.K.Kreeshma	(2021IT19)
Ms.S.Nagammai	(2021IT22)
Ms.R.Nivetha	(2021IT23)
Ms.A.Poornima	(2021IT25)
Ms.P.Shahin Barhana	(2021IT29)
Ms.R.Sharumathy	(2021IT32)

Under the Guidance of

Dr.N.Kalaichelvi, MCA, M.Phil, Ph.D

Assistant Professor

Department of Information Technology



Fatima College (Autonomous)

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Maryland, Madurai – 625018

November, 2022



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Mary Land, Madurai

To Whomsoever It May Concern

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S. No.	Reg.No.	Name of the Students	Title of the Project
1.	2021IT16	S. Kavisri	ENVIRONMENTAL STUDIES- BIODIVERCITY LOSS AND ITS IMPACT ON AGRICULTURE
2.	2021IT19	K. Kreeshma	
3.	2021IT22	S. Nagammai	
4.	2021IT23	R. Nivetha	
5.	2021IT25	A.Poornima	
6.	2021IT29	P. Shahinbarhana	
7.	2021IT32	R. Sharumathy	

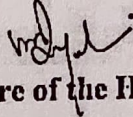
D. D. D.
Project Guide

[Signature]
Co-ordinator,
Environmental Studies

CERTIFICATE

This is to certify that this project entitled "Environmental Studies - Biodiversity Loss And Its Impact On Agriculture" submitted by Ms. S.Nagammai, Ms.S.Kavisri, Ms.R.Nivetha, Ms.A.Poornima, Ms.K.Kreeshma, Ms.P.Shahinbarhana, Ms.R.Sharumathy for the degree of bachelor of science is based on the result of studies carried out by them under my guidance and supervision in the Post Graduate Department of IT, Fatima college (Autonomous), Madurai-18. This project has not been submitted elsewhere for any other degree.

15/08/22
Course Teacher


Signature of the Head of the Department

Place: Madurai

Date: 18/11/2022

DECLARATION

We do hereby declare that this work has been originally carried out by us under the guidance and supervision of Dr.N.Kalaichelvi, Assistant Professor in the Department of Information Technology, Fatima College (Autonomous), Madurai-18 and this work has not been submitted elsewhere for any other degree.

Place: Madurai

Date: 18/11/2022

S. Kavisri

Ms. S. Kavisri(2021IT16)

K. Kreeshma

Ms. K.Kreeshma(2021IT19)

S. Nagammai

Ms. S.Nagammai(2021IT22)

R. Nivetha.

Ms. R.Nivetha(2021IT23)

A. Poornima

Ms. A.Poornima(2021IT25)

P. Shahin Barhana

Ms. P. Shahin Barhana(2021IT29)

R. Sharumathy

Ms. R.Sharumathy(2021IT32)